U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

### **SEARCH REQUEST FORM**

Serial Number: \_ M / / / ロ号
Art Unit:

### Search Topic:

Requestor's

Name: \_\_\_\_

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).

Date: Phone:

### STAFF USE ONLY

Date completed:	Search Site	Vendors
Searcher:	STIC	IG
Terminal time:	CM-1	STN
Elapsed time:	Pre-S	Dialog
CPU time:	Type of Search	APS
Total time:	N.A. Sequence	Geninfo
Number of Searches:	A.A. Sequence	SDC
Number of Databases:	Structure	DARC/Questel
	Bibliographic	Other

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April 8, 2004, 17:03:02; Search time 17:8804 Seconds (without alignments) 1264,231 Million cell updates/sec
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1242
1 MIVLAPAWSPITYLLLILL......RPGEQVPPVPSPQDLLLVEH 235
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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1: pir1:*
2: pir2:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

	Description	3 liga	/FLK2	3 liga	flt3/flk-2 ligand	FLT3/FLK2 ligand (	flt3 ligand isofor	hypothetical prote	74K alpha trans-in	hypothetical prote	adhalin - golden h	splicing factor SF	hypothetical prote	hypothetical prote	OP protein - Kenne	protein-tyrosine-p	tyrosine kinase re	glutamic acid-rich	hypothetical prote	sulfated surface g	hypothetical prote	Ω,	igi)		gamma-glutamyl car	ч	H	l prot	pothetical	Ig epsilon-chain -
SUMMARIES	ID	3844	S43293	I39076	A49265	S43291	I58343	T22672	TNBE12	T19543	148201	S60735	<b>AB</b> 1990	T00257	JQ0532	A32290	A53137	A40437	T17832	A33647	T28004	A87646	A37374	T03162	A39283	E75630	A45690	T19486	T19800	I36948
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# ALIGNMENTS

RESULT 1 19840 1150 1150 1150 1150 1150 1150 1150 11	Query Match Best Local Similarity 100.0%; Score 1242; DB 2; Length 235; Best Local Similarity 100.0%; Pred. No. 5e-99; Matches 235; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	1 MTVLAPAMSPTTYLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTV 60	61 ASNLODBELCGGLWRLVLAQRWKBRLKTVAGSKMOGLLERVNTEIHFYTKCAFQPPPSCL 120	121 RFVQTNISRLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPPWSPRPLEATAFT 180
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A; Residues: 1-163, 0.165, 'HYAG' <RES>
A; Accession: 146346
A; Residues: 1-197, 'L', 188-231 <RE2>
A; Residues: 1-197, 'L', 189-231 <RE2>
A; Cross-references: EMEL.U29875, NID: g1072039; PIDN:AAA90951.1; PID: g1072040
A; Residues: 1-197, 'L', 188-231, 'Relner, G.; Namikawa, R.; Rennick, D.; Roncarolo, M.G.; Zlotnik, Nature 368, 643-648, 1995, Mull: Malkawa, R.; Rennick, D.; Roncarolo, M.G.; Zlotnik, A; Title: Ligand for FIT3/FIK2 receptor tyxosine kinase regulates growth of haematopoiet A; Reference number: S43290; MUID: 94195428; PMID: 8145851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            fli3/flk-2 ligand precursor - mouse
C;Species: Mus musculus (house mouse)
C;Species: Mus musculus (house mouse)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 08-Oct-1999
C;Accession: A49265; 149347; 149346; S43290
R;Lyman, S.D.; James, L.; Vanden Bos, T.; de Vries, P.; Brasel, K.; Gliniak, B.; Hollir
D; Williams, D.E.; Beckmann, M.P.
Cell 75, 1157-1167, 1993
A;Title: Molecular cloning of a ligand for the flt3/flk-2 tyrosine kinase receptor: a FA;Reference number: A49265; MUID:94084791; PMID:7505204
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A.Nolecule type: mRNA
A.Polecule type: mRNA
A.Aclecule type: MSNA
A.Aclecule type: MVD:96032581; PMID:7566977
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MIVLAPAWSPTTYLLILLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTV
                                                                                       ASNIQDEELCGGLWRLVLAQRWMERLKTVAGSKWQGLLERVNTEIHFVTKCAFQPPPSCL
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A;Molecule type: mRNA
A;Residues: 1-197, 'L',198-231 <HAN>
A;Experimental source: clone T110
A;Experimental source: clone T10
A;Note: the sequence from Fig. 2c is inconsistent with that from Fig.
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llarity 70.3%; Pred. No. 1.7e-58;
Conservative 17; Mismatches 43;
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C;Keywords: transmembrane protein
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Cispecies: Homo sapiens (man)
Cipate: 20-Oct-1994 #sequence_revision 10-Nov-1995 #text_change 17-Mar-1999
Cipate: 20-Oct-1994 #sequence_revision 10-Nov-1995 #text_change 17-Mar-1999
Cipate: 20-Oct-1994 #sequence_revision 10-Nov-1995 #text_change 17-Mar-1999
Cipate: 20-Oct-1994 #sequence_revision 10-Nov-1995 #text_change 1.; Zurawski, S.; Bazan, J.F.; Ka felt, A.; Muench, M.; Kelner, G.; Namikawa, R.; Rennick, D.; Roncarolo, M.G.; Zlotnik, A. Nature 368, 643-648, 1994
A)Title: Ligand for FLT3/FLK2 receptor tyrosine kinace regulates growth of haematopoieti A,Reference number: S43293
A)Accession: S4323
A)Accession: S4329
A)A
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         121 RFVQTNISRLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPPWSPRPLEATAPT 180
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C;Species: Homo sapiens (man)
C;Species: Pomo sapiens (man)
C;Accession: 13908
R;Accession: 13076
R;Lyman, S.D.; Stocking, K.; Davison, B.; Fletcher, F.; Johnson, L.; Escobar, Oncogene 11, 1165-1172, 1995
A;Title: Structural analysis of human and murine flt3 ligand genomic loci.
A;Reference number: 139075; MUID:96032581; PMID:7566977
A;Accession: 139076
A;Accession: 139076
A;Molecule type: DNA
A;Rēsidues: 1-178 <RES>
A;Compare 1178 <RES
A;Com
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67.1%; Score 834; DB 2; I
Best Local Similarity 100.0%; Pred. No: 3.2e-64;
Matches 160; Conservative 0; Mismatches 0;
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119

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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OM protein - protein search, using sw model

April 8, 2004, 16:59:26 ; Search time 12.7717 Seconds (without alignments) 958.091 Million cell updates/sec Run on:

US-08-994-468-6 1242 1 MIVLAPAMSPITYLLLILLL.....RPGEQVPPVPSPQDLLLVEH 235 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

141681 segs, 52070155 residues Searched:

141681 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt\_42:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	
SUMMARIES	F131 HUMAN F131 HUMAN F131 WOUSE PCLO CHICK GBR2 HUMAN SSCA HUMAN SSCA HUMAN TNR3 MOUSE MPIP DROME DDR1 MOUSE CNG4 BOVIN SSGP VOLCA ARTE HUMAN RATE HUMAN RATE HUMAN RATE HUMAN RATE HUMAN NPHN RAT ABFI MOUSE BCC HUMAN NPHN RAT ABFI HUMAN NPHN RAT ABFI HUMAN NPHN RAT ABFI HUMAN NPHN RAT ABFI HUMAN NPHN RAT ABFI HUMAN NM11 MOUSE T230 HUMAN MM11 MOUSE T230 HUMAN MM11 MOUSE T230 HUMAN STKI RAT MM11 HOUSE BCC HUMAN STKI RAT MM11 HOUSE BCC HUMAN STKI RAT MM11 HOUSE BCC HUMAN STKI RAT MM11 HOUSE BCC HUMAN STKI RAT MM11 HOUSE SCA MOUSE SCA MOUSE SCA MOUSE SCA MOUSE BCC HUMAN
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CEFD STRCL GBRZ_RAT KPCI_COCHE ZFRZ_HUMAN YDC9_SCHPO SF01_MOUSE SF01_MOUSE PCLO RAT KIP3_YEAST KIP3_YEAST AVRB_RAT SGCA_RABIT PD6I_RAT
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                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its modified anorphofit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                       PIR; 138440; 138440.

R PIR; 138440.

R PIR; 139076; 139076.

R PDB; IETE; 09-UW-00.

R Genew; HGNC:3766; FLT3LG.

R GO; GO:000510; F: receptor binding; TAS.

GO; GO:0005284; F: segulation of cell proliferation; TAS.

R GO; GO:000165; F: signal transduction; TAS.

R GO; GO:007165; F: signal transduction; TAS.

R GO; GO:007165; F: signal transduction; TAS.

R PEam; PF0473; FIL3 lig; I.

R Pfam; PF0477; IL13 lig; I.

M Cytokine; Glycoprotein; Transmembrane; Alternative splicing; Signal;

M STANL
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N-LINKED (GLCNAC. . .) (POTENTIAL).
DSSTLPPPWSPRPLEATA -> VETVFHRVSQDGLDLTS
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EXTRACELLULAR (POTENTIAL).
POTENTIAL.
CYTOPLASMIC (POTENTIAL).
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          Name=2; Synonyms=Soluble;
IsoId=P49771-2; Sequence=VSP_004251, VSP_004252;
                                                                                                                                                                                                                                                                                                                                                                                                                /FTId=VSP 004251.
Missing (In isoform 2)
/FTId=VSP 004252.
G -> A (IN REF. 1).
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IsoId=P49771-1; Sequence=Displayed;
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                                                                                                                    EMBL, U04806; AAA17999.1; -. EMBL, U03858; AAA19825.1; -. EMBL; U29874; AAA90949.1; -. EMBL; U29874; AAA90950.1; -.
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Best Local Similarity 100.
Matches 235; Conservative
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ASNLODEELCGGLWRLVLAQRWMBRLKTVAGSKWQGLLERVNTEIHFVTKCAFQPPPSCL
                                                                                                                                                                                                                                                                                                                                                               121 REVOTNISRLLOBISBOLVALKEWITRONFSRCLELOCOPDSSTLEPEWSPRPLEATAPT
                                                                                                                                                                                                                                                                                                                                                                                                                          61 ASNLODEELCGGLWRLVLAQRWMERLKTVAGSKNQGLLERVNTEIHFVTKCAFQPPPSCL
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MEDLINE=96032581; PubMed=7566977;
Lyman S.D., Stocking K., Davison B., Fletcher F., Johnson L.,
Escobar S.; Stocking K., Davison B., Fletcher F., Johnson L.,
"Structural analysis of human and murine flt3 ligand genomic loci.";
Oncogene 11:1165-1172(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 APOPPLLILLILIPVGLLLLAAAWCLHWORTRRRTPRAGEQVPPVPSPQDLLLVEH 235
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P49772; 064085;
01-0CT-1996 (Rel. 34, Last sequence update)
01-0CT-2003 (Rel. 34, Last annotation update)
10-0CT-2003 (Rel. 42, Last annotation update)
10-0CT-2010 (Rel. 42, Last annotation update)
110-0CT-2010 (Rel. 44, Last annotation update)
110-0CT-2010 (Rel. 34, Last
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BEQUENCE FROM N.A.

Hannum C., Culpepper J., Campbell D., McClanahan T., Zurawski S.,

Bazan J.F., Kastelein R., Hudak S., Wagner J., Mattson J., Luh J.,

Buda G., Mattina N., Peterson D., Menon S., Shanafelt A.,

Muench M., Kalner G., Namikawa R., Rennick D., Roncarolo M.G.,

Zlotnik A., Rosnet O., Dubreuil P., Birnbaum D., Lee F.,

Ligand for FIT3/FixZ receptor tyrosine kinase regulates growth of

haematopoietic stem cells and is encoded by variant RNAs.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SECURNCE FROM N.A., AND ALTERNATIVE SPLICING.
MEDLINE=95124710; PubMed=7824267;
MEDLINE=95124710; PubMed=7824267;
Byman S.D.; James L., Escobar S., Downey H., de Vries P.,
Lyman S.D.; James L., Escobar S., Downey H., de Vries P.,
Cleveland L.S.;
Cleveland L.S.;
Tidentification of soluble and membrane-bound isoforms of
filt3 ligand generated by alternative splicing of mRNAs.";
Oncogene 10:149-157(1995).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DSSTILPPRSPIALEARELPERRRQLLLILLLLLPLTUL
LAAAWGLRWQRARRGELHPGVPLPSHP -> GNGGPRAQH
HGATRLTATALLTVCPGLLLPLVGTSHMFFLPYFLSFLSF
Submitted (APR-1996) to the EWBL/GenBank/DDBJ databases.
-!- FUNCTION: Stimulates the proliferation of early hematopoietic cells. Synergizes well with a number of other colony stimulating factors and interleukins.
-!- SUBGNIT: Homodimer (soluble isoform) (By similarity).
-!- SUBCELLUIAR LOCATION: Type I membrane protein. Two soluble isoforms are also produced by alternative splicing. One of which, isoform 3/E6, is biologically active, while the other, isoform 4/E6Deltel6, is inactive.
-!- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /FTId=VSP_004254.
Missing-LSP_00455.
PTId=USP_004555.
VQCD -> GLIMQARLTINSKQSSCLSVLSAGIT (in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PIR; A49265; A49265.

MGD; MGI:95560; Flt31.

InterPro; IPR004213; Flt3 lig.

Pfam; PF02947; flt3 lig. 1.

Cytokine; Glycoprotein; Transmembrane; Alternative splicing; Signal.

SIGNAL
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N-LINKED (GLCNAC. . .) (POTENTIAL)
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/FTIG=VSP_004253.
DSSTLL -> GSHYAG (in isoform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61.8%; "Score 768; DB 1; Length 23; 70.0%; Pred. No. 8.6e-57; ive 17; Mismatches 43; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3A3680D3CB69FBA6 CRC64;
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                                                                                                                                                                                                                                            VSP_004255;
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CYTOPLASMIC (POTENTIAL).
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                   Event=Alternative splicing; Named isoforms=4;
Name=1; Synonyms=6C;
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MISSING (IN REF. 2)
                                                                                                                                                                                              Name=2; Synonyms=5H;

IsoId=94972-2; Sequence=VSP_004253;

Name=3; Synonyms=E6;

IsoId=949772-3; Sequence=VSP_004254, Name=4; Synonyms=E6Delta16;
                                                                                                                                                                                                                                                                      IsoId=P49772-4; Sequence=VSP_004256;
                                                                                                                                                                                  IsoId=P49772-1; Sequence=Displayed;
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EMBL, 123636; AAA39436.1;
EMBL, 1028975; AAA80952.1;
EMBL; 376459; AAB33069.1;
EMBL; S76459; AAB33070.1;
EMBL; S76464; AAB33070.1;
EMBL; U44024; AAA93307.1;
EMBL; U44024; AAA93306.1;
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232 AA;
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                                                                                                                                               60 VASNLQDEELCGGLWRLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSC
                                                                            61 VAVNLQDEKHCKALMSLFLAQRMIEQLKTVAGSKMQTLLEDVNTEIHFVTSCTFQPLPEC
                                                                                                                              120 LRFVQTNISRLLQETSEQLVALKPWITR--QNFSRCLELQCQPDSSTLPPPWSPRPLEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19 ILISSGLSGTQDCS----FQHSPISSDFAVKI--RELSDYLLQDYPVTVASNLQDEELCG-
                                                                                                                                                                                                   227
                                                                                                                                                                                                                      178 APTAPOPP---LILLLILLPVGLLLLAAAWCLHWQRTRRRTPRPGEQVPPVPSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183 QPPLLLLLLLLPVGLLLLAAAWCLHWQRTRRRTPRRGEQVPPVPSPQDLL 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Davison A.J., Scott J.E.;
"The complete DNA sequence of varicella-zoster virus.";
J. Gen. Virol. 67:1759-1816(1986).
-!- FUNCTION: Modulate alpha trans-inducing factor-dependent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7.4%; Score 92; DB 1; Length 661; 6.6%; Pred. No. 3.6; ve 29; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GYGWMLWFLDVVD----ARVCRHLKLQFRRIRGPRASV----IPDDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          InterProj IPR005051; Herpes_UL46.
Pfam; PP03387; Herpes_UL46; 1.
Transcription regulation; Trans-acting factor.
SEQUENCE 61 AA, 74272 MM; CSCA77A16D365379 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Varicella-zoster virus (strain Dumas) (VZV).
Viruses; dsDNA viruses, no RNA stage; Herpesviridae;
Alphaherpesvirinae; Varicellovirus.
                                                                                                                                                                                                                                                                                                                                                                01-MAR-1989 (Rel. 10, Created)
01-MAR-1989 (Rel. 10, Last sequence update)
01-NOV-1990 (Rel. 16, Last annotation update)
Alpha trans-inducing factor 74 kDa protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE=86306657; PubMed=3018124;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             activation of alpha genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; X04370; CAA27895.1; -. PIR; C27342; TNBE12.
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                                                                                                                                                                                                                                                                                                                               STANDARD;
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Best Local Similarity
Matches 61; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=10338;
                                                                                                                                                                                                                                                                                                                               ATI2_VZVD
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10; Gaps

Length 232;

Best Local Similarity 70.0%; Matches 163; Conservative

Query Match

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DOMAIN
DOMAIN
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GBR2_HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                **Aczonin, a 550-kd putative scaffolding protein of presynaptic active a macros, shares homology regions with rim and bassoon and binds profilin...

**Zones, shares homology regions with rim and bassoon and binds profilin...

**Zones, shares homology regions with rim and bassoon and binds

**Zones, shares homology regions with rim and bassoon and binds

**Zones, shares homology regions with rim and profilin (By similarity)...

**Zones, shares homology regions and in synaptic vesicle trafficking (By similarity)...

**Zones, shares homology regions and in synaptic side of the presynaptic junctions (By similarity)...

**Zones, shares homology regions and in synaptic side of synaptic junctions (By similarity)...

**Zones, shares homology regions and profilin (By similarity)...

**Zones, shares homology regions and hid binding calcium and phospholipids. Calcium binds with low affinity but with high specificity and induces a large conformational change...

**Zones, shares homology regions and shares a large conformational change...

**Zones, shares homology regions and shares him shares a large conformational change...

**Zones, shares homology regions him shares h
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                                                                                                                                                                                        ezalus (Chicken).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R GO; GO: 00045202; C: Symaptic junction; ISS.
R GO; GO: 0005509; F: calcium ion binding; ISS.
R GO; GO: 0005520; F: calcium dependent phospholipid binding; ISS.
R GO; GO: 0005520; F: profilm binding; ISS.
R GO; GO: 0005520; F: profilm binding; ISS.
R GO; GO: 0006580; P: symaptic vesicle targeting and biogenesis; ISS.
R GO; GO: 0016080; P: symaptic vesicle targeting; ISS.
R InterPro; IPR000899; Z2.
R InterPro; IPR000899; Z2.
R InterPro; IPR001565; Synaptotagmin.
R InterPro; IPR001565; Synaptotagmin.
R Pfam; PF00158; C2; 2.
R Ffam; PF00159; Z2.
R Ffam; PF00159; Z2.
R SWART; SW00239; GZ; Z.
R SWART; SW00239; GZ; Z.
R PRINT; SW00239; GZ; Z.
R PROSITE; PS00499; CZ DOMAIN 1; 1.
R PROSITE; PS50004; CZ DOMAIN 1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 X 10 AA TANDEM APPROXIMATE REPEATS P-A-K-P-Q-P-X. C4-TYPE (POTENTIAL). C4-TYPE (POTENTIAL).
                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
TISSUB-Brain;
MEDLINE=99439764; PubMed=10508862;
WADA X., Kibschull M., Laue M.M., Lichte B., Petrasch-Parwez E.,
Kilimann M.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS50106; PDZ; 1.
Calcium/phospholipid-binding; Zinc; Metal-binding; Zinc-finger;
                                                                                                 28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
PCLO OR ACZ.
PCLO OR ACZ.
                                                               5120 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; Y19187; CAB60725.1; -. HSSP; P04410; 1A25.
                                                                 STANDARD;
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357
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859
                                                                                                                                                                                                                                                 Gallus.
NCBI_TaxID=9031;
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258
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836
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DOMAIN
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ZN_FING
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                                            CHICK
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2402
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          2344 ILPKPAIYPKKKSOIQAPMATAPTAVPLVTSVATLESAAVLKNHVVPVTKTYTPTP-PPV
                                                                                                                                                                                                                                                                                      90 AGSKWQGLLERVNTEIHF-------VTKCAFQPPPSCLRFVQTN-----
                                                                                                                                                                                                                                                                                                                                                                                                   127 --ISRLLQETSE-QLVALKPWITRQNF----SRCLELQCQPDSSTLPPPWSPRPLEATAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAPQP-------PLLLLLLLLLLAAAWCLH-WQRTRRTPRPGEQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GBR2 HUMAN STANDARD; PRT; 941 AA.
075899, 075974, 075975; Q8WX04; Q9P1R2; Q9UNR1; Q9UNS9;
16-0CT-2001 (Rel. 40, Created)
16-0CT-2001 (Rel. 40, Last sequence update)
10-0CT-2003 (Rel. 42, Last annotation update)
Gamma-aminobutyric acid type B receptor; subunit 2 precursor (GABA-B receptor 2) (GABA-B-R2) (GABA-B-R2)
                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=20193514; PubMed=10727622;
Clark J.A., Mezey E., Lam A.S., Bonner T.I.;
Clark John of the GABA(B) receptor subunit gb2 in rat CNS.";
Brain Res. 860:41-52(2000).
                                                                                                                                                                                                                                49;
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                                                                                                                                                                      7.3%; Score 90.5; DB 1; Length 5120; 24.3%; Pred. No. 48; Live 19; Mismatches 72; Indels 49
2324 2343 POLY-PRO.
4414 4493 PDZ.
4627 4726 C2 DOMAIN 1.
5120 Aa, 560751 MW; A658D9891B65B412 CRC64;
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TISSUBALIPPOcampus,
BOTOWSKY HILD I.A. T., Gerald C.;
Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GABA(B) receptor.";
Nature 396:679-682(1998).
                                                                                                                                                                                                                                      Conservative
                                                                                                                                                    Query Match
Best Local Similarity
--hes 45; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPKPS 2407
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TISSUE=Fetal brain;
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Q8h785 arabidopsis Q9dwh8 rat cytomed

28n775 homo sapien

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Q9dwh8 rat cytomeg Q9dwh8 rat cytomeg Q95tb arabidopsis O17889 caenorhabdi Q8vdd drosophila Q9vdd2 drosophila synechcoocc Q8bpis mus musculu Q8vd2 mus musculu O17610 caenorhabdi Q9vx3 anabaena sp Q9umt homo sapien Q8k732 yersinia ps Q9wid oryza sativ Q94d6 oryza sativ Q94d6 oryza sativ Q94d6 oryza sativ Q94d6 oryza sativ Q94d5 mus musculu Q8c128 mus musculu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 RFVQTNISRLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPPWSPRPLEATAPT 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 ASNIQDEELCGGIMRIVIAQRMMERLKTVAGSKMQGIJBRVNTEIHFVTKCAFQPPPSCL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MIVLAPAWSPITYLLLLLLSSGLSETQDCSFQHSPISSDFAVKIRELSDYLLQDYPVIV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
Kallna T., Storek J.;
"T-cell transplantation in monkeys.";
                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
Cercopithecinae; Papio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 6; Length 236;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92.2%; Score 1145.5; DB 6; Length ilarity 94.9%; Pred. No. 7.9e-104; Conservative 0; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; AY226585, AAO72538.1; -. GO; GO:0016020; C:membrane; IEA. GO; GO:0016020; C:membrane; IEA. GO; GO:0005125; F:Cytokine activity; IEA. InterPro; IFR04213; Flt3.1ig. Flt3.1ig. SEQUENCE 236 AA; Z6591 MW; 740F33A6A6DC2163 CRC64;
                                                                                                                                                                                                                                                                                                                                                          01-JUN-2003 (TrEMBLrel. 24, Created)
01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
                                                                                                                                                                                                                                                                                                                                         236 AA.
                                                                                                                                                                                                                                                                                         ALIGNMENTS
                                                                                                                                                                          Q9GKE2
O56971
Q8K4Z5
Q8C175
Q8C128
Q8C0M7
                                                                                                                                               08N158
0943D5
075064
                         Q9CSTO
017889
Q8VD70
Q9VDD2
Q9HAD2
Q8DH3
Q8BFIS
Q8RFIS
Q17610
Q8N775
Q8H785
                                                                                                            Q8YWX3
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O8KR32
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Papio cynocephalus x Papio anubis.
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Les 224; Conserv
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Query Match
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Matches
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Q865Z3
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Q9gkd9 bos taurus
Q61104 mus musculu
Q8vch4 mus musculu
Q7z6n5 homo sapien
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Q84k17 syrachococo
Q81418 oryza sativ
Q8vim6 mus musculu
Q8vjaqa arabidopsis
Q7wga9 bordetella
Q7vu97 bordetella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q865z3 papio cynoc
Q9mzv0 canis famil
Q9mzu9 felis silve
Q9gke0 bos taurus
                                                               8, 2004, 17:02:32 ; Search time 45.9783 Seconds (without alignments) 1612.649 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                       235
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                                                                                                                      MIVLAPAWSPITYLLLLLLL.....RPGEQVPPVPSPQDLLLVEH
                                                                                                                                                                                       1017041
          GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                      Potal number of hits satisfying chosen parameters:
                                                                                                                                                                     1017041 segs, 315518202 residues
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                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                              protein search, using sw model
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Q9MZV0
Q9MZU9
Q9GKD9
Q9GKD9
Q61104
Q7CKN5
Q9CKG8
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Q8VIM6
Q8GYA4
Q7WGA9
Q7VU97
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sp_bhage:*
sp_plant:*
sp_rodent:*
sp_virus:*
sp_virus:*
sp_virus:*
sp_vertebrate:*
sp_unclassified:*
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Gapop 10.0 , Gapext 0.5
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sp_mammal:*
sp_mhc:*
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61 ASNLQDBELCGGLWRLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCL 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-20570936; PubMed=11120823; Mwangi W., Brown W.C., Palmer G.H.; Mwangi W., Brown W.C., Palmer G.H.; Indentification of fetal liver tyrosine kinase 3 (Flt3) ligand domain required for receptor binding and function using naturally occurring Ilgand isoforms."
J. Immunol. 165:6966-6974 (2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 ASNLODDELCGFFWHLVIAQRWMGRLKAVAGSOMOSLLEAVNTEIHFVTLCAFQFLPSCL
                                                                                                                                                                                                                                                                                                                                                                                     1 MTVLAPAWSPTTYLLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTV
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"Molecular cloning of canine and feline flt3 ligand reveals high degree of similarity to the human and mouse homologue but uniquely long cytoplasmic domain.";

DNA Seq. 11:163-166(2000).

BMBL; AF155149; AAF87089.1; -
HSSP; P99771; 1ETE.

GO; GO:0005125; F:cytokine activity; IEA.

GO; GO:005125; F:cytokine activity; IEA.

FILTERPEO, IPROQUAI3; FILI3 lig.

PEM; PF02247; flt3 lig; 1.

SEQUENCE 291 AA; 32459 MW; BF85A10A5EAODCC6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR.2001 (TrEMBLrel. 16, Created)
01-MAR.2001 (TrEMBLrel. 16, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Flt3 ligand isoform.1.
Bos taurus (Bovine).
Bukaryota, Metazaa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Cetartiodactyla, Ruminantia, Pecora; Bovoidea;
Bovidae, Bovinae, Bos.
                                                                                                                                                                                                                                                                                   Score 894.5; DB 6; Length
Pred. No. 3.5e-79;
9; Mismatches 33; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                67.6%; Score 840; DB 6; Length 29
76.3%; Pred. No. 7.5e-74;
iive 12; Mismatches 37; Indels
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GO; GO:0005125; F:cytokine activity; IEA.
InterPro; IPRO04213; Fil3 lig.
Pfam; PF02947; fil3 lig; I.
SEQUENCE 292 AA; 32390 MW; D68B9ED79221202D CRC64;
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EMBL; AF282985; AAF99322.1; -.
                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 80.5%;
Matches 178; Conservative
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Best Local Similarity 76.34
Matches 171; Conservative
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61 ASNLQDEELCGGLWRLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPSCL 120
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                                                                                                         181 APQRPLILLILLPVGLILLATAMCIHWORTRRRTPRPREGVPPVPSPODILLVEH 236
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                                                                             181 APQPP-LLLLLLLPVGLLLLAAAWCLHWQRTRRRTPRRGEQVPPVPSPQDLLLVEH 235
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.

MEDLINE=20358731; PubMed=10902925;

Yang S., Sim G.K.

Wolcoular cloning of canine and feline flt3 ligand reveals high
degree of similarity to the human and mouse homologue but uniquely
long cytoplasmic domain.";

DNA Seq. 11:163-166(2000);

EMBL; AF155148; AAR87088.1;

HSSP; P49711; IETE.
                                                                                                                                                                                                                                                                                   01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0TN-2003 (TrEMBLrel. 24, Last annotation update)
Flt3 ligand.
Canis familiaris (Dog).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi;
Mammalia; Eutheria, Carnivora, Fissipedia, Canide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-077-2000 (TrEMBLrel. 15, Created)
01-077-2000 (TrEMBLrel. 15, Last sequence update)
01-UTM-2003 (TrEMBLrel. 24, Last annotation update)
Flt3 ligand.
Felts slivestrias catus (Cat).
Eukaryota; Metazca; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Carnivora; Fissipedia; Felidae; Felise.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GO, GO:0016020, C:membrane, IEA.
GO, GO:0005125, F:cytckine activity; IEA.
Interpro, IPR004213, F113_lig.
Pfam; PF02947; F123_lig; I.
SEQUENCE 294 AA; 32394 MW; 6859917A3B74ABCD CRC64;
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Length 292;

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SEQUENCE FROM N.A. MEDLINE=20358731; PubMed=10902925; Yang S., Sim G.K.;

60ZM60

Q9MZU9

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April 8, 2004, 16:58:41; Search time 64.4973 Seconds (without alignments) 1029.480 Million cell updates/sec
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1 MTVLAPAWSPTTYLLLLLLL.....RPGEQVPPVPSPQDLLLVEH 235
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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1: geneseqp1980s:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Aar67541 Human flt	9 Human	Aay69719 Full leng	2 Human	9 Human	···	C neof	Secrete		Human	5 Amino	13	25	O Secret		4 Human	1 Human	7 Human f	0 Mature	Aay69729 Human flt	7 Human	3 Human	6 Human	Aay69722 Human flt	Aay69724 Human flt
SUMMARIES	q1	AAR67541	AAW67769	AAY69719	AAB20192	ABB08129	ABG31626	AA019091	AAG79949	ABG74239	ADD22874	ADD80915	ADE48117	ADE80752	AAG79950	AAR66175	AAB20194	AAY69721	AAW69007	AAY69720	AAY69729	AAY69727	AAY69723	AAY69726	AAX69722	AAY69724
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AAY69728 AAY69725 AAB20195	AAG79948 AAY58204 AAY58210	AAB20193 ABP72857 AAY58206	AAY58207 AAY58211	AAK87540 AAW67768 AAB20186 ARG74238	ADD22870 ADE48118	AAK66177 AAB20189 AAW77930
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### ALIGNMENTS

AAR67541 standard; protein; 235 AA

RESULT 1 AAR67541

Isolated ligands for flt 3 receptors - useful for treating anaemia, AIDS 27. .182 /label= Extracellular domain /note= "extracellular domain may start at position 28" /183. .205 /label= Transmembrane\_domain 1. .26 /label= Sig\_peptide /note= "signal peptide may extend to position 27" Flt-3 ligand; flt3-L; anemia; cancer; AIDS; gene therapy. 206. .235 /label= Cytoplasmic\_domain Location/Qualifiers 93US-00068394. 93US-00106463. 93US-00111758. 93US-00162407. 94US-00209502. 94EP-00303575 (revised)
(first entry) Lyman SD, Beckmann MP; (IMMV ) IMMUNEX CORP. WPI; 1995-008071/02. N-PSDB; AAQ79079. Human flt-3 ligand. 12-AUG-1993; 25-AUG-1993; 03-DEC-1993; 07-MAR-1994; 11-MAY-1994; Homo sapiens. 19-MAY-1994; 25-MAR-2003 05-AUG-1995 07-DEC-1994. 24-MAY-1993; EP627487-A2. AAR67541; Peptide Domain Domain Domain 

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A method has been developed of initiating or enhancing: (i) an antigenspecific immune tolerance; or (ii) immunotolerance of a therapeutic immunocopanic molecule by addition of a polypeptide, before, after or with the mucosal administration of an immunotolerising amount of the antigen
                                                                                                                                                                                         9
                                     A human T-cell lambda-gtl0 random primed cDNA library was screened with fragment corresponding to the extracellular domain of mouse flt3 ligand (flt8-1) (nt 105-516 of AAQ79076) to isolate human flt3-L cDNA. Flt-3 stimulates progenitor and stem cells, and can be used e.g. in gene therapy protocols. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       antigen specific immune tolerance
                                                                                                                                                                                     1 MIVLAPAWSPITYLLLLLLSSGISGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVIV
                                                                                                                                                                                                                                  ASNIQDEBLCGGLWRLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCL
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antigen-specific peripheral immune tolerance, flt3-ligand, flt3-L, immunogenic, autoimmune disease, organ transplantation, food allergy, tissue transplantation.
                                                                                                                                                                    MTVLAPAWSPITYLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTV
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                                                                                                                           Length 235;
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                                                                                                                          Score 1242; DB 2;
Pred. No. 5.8e-109;
; Mismatches 0;
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                    Disclosure; Page 29-30; 33pp; English
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100.0%; Pr
tive 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-00877421
                                                                                                                            Query Match
Best Local Similarity 100.
Matches 235; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (IMMV ) IMMUNEX CORP
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N-PSDB; AAV81506.
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  and various cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                           Human flt3-ligand.
                                                                                                         Sequence 235 AA;
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binding the flt3 receptor and is: a) amino acids 28-x of murine flt3 binding the flt3 receptor and is: a) amino acids 28-x of murine flt3 19 and (flt3-L), where x is an amino acid between 163-231; b) amino acids 28-y of human flt3-L, where y is an amino acid between 160-235; and c) a polypeptide that has at least 90% identity to the polypeptides of either (a) or (b). The method ameliorates the effects of autoimmune diseases, food allergies or organ or tissue rejection following transplantation. Administration of flt3-L allows lower doses of antigens to be used in human flt3-L allows lower doses of antigens to be used in human flt3-L allows lower doses of antigens to represents
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Immunomodulator; immunosuppressive; cytostatic; antianemic; anti-HIV; neuroprotective; antiallergic; flt3 ligand; flt3-L; wild type; allergy; cell surface tyrosine kinase receptor; hematopolatic progenitor cell; cellular expansion; cellular differentiation; natural killer cell; cancer; dendritic cell; immune response; autoimmunity; immunosuppression; myelodysplasia; aplastic anemia; HIV infection; lymphoma; neuroblastoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      immune
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 RFVQTNISRLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPPWSPRPLEATAPT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 1242; DB 2;
.larity 100.0%; Pred. No. 5.8e-109;
Conservative 0; Mismatches 0;
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multiple myeloma; leukemia.
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N-PSDB; AAZ59064.
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les 235; Conserv
                                                                                                                                                                                                                                                                                                                                                                           Sequence 235 AA;
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                      The invention relates to novel soluble flt3 ligand (flt3-L) polypeptides which exhibits increased or decreased biological activity relative to the full length wild type (this sequence) or mature (AARG6720) flt1-L. polypeptides. The flt3-L protein binds call surface tyrosine kinase or eceptors and regulate growth and differentiation of hematopoietic progenitor calls. The flt3-L protein can be used to induce callular properiors can define the protein calls, especially in the presence of natural killer (NK) or dendritic calls, especially in the presence of growth factors such as interleukins, colony simulating factors or protein kinases. The protein can also modulate, augment or enhance a patient's immune response and can also modulate, augment or enhance a patient's allergy, autoimmunity or immunosuppression). The protein may be used to treat a pathological condition e.g. myelodysplasia, aplastic anemia, HIV infection, breast, small cell lung, testicular or ovarian cancer, lymphoma, multiple myeloma, neuroblastoma or acute leukemia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Flt-3 ligand; Fms-like tyrosine kinase; human; vaccine; immunotherapy; therapy; tumour; cancer; melanoma; glioma; lymphoma; autoimmune disease; infection; gene therapy.
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                                                                                                                                                                                                                                                                                                      0; Indels 0; Gaps
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                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 1242; DB 3; Length 235; Best Local Similarity 100.0%; Pred. No. 5.8e-109; Matches 235; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /label= Extracellular_domain
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/label= Cytoplasmic_domain
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/label= Mature protein
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'label= Signal_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
Claim 1; Page 72-73; 90pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human Flt-3 ligand.
                                                                                                                                                                                                                                                 Sequence 235 AA;
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The present sequence is that of human Fms-like tyrosine kinase (Flt-3 ligand). The invention is directed to enhancing the immune response of a vertebrate to an antigen or a cytokine by administering in vivo, into a tissue of a vertebrate, a Flt-3 ligand-encoding polymuclectide, and 1 or more antigen. or cytokine-encoding polymuclectides. The Flt-3 ligand encoding polymuclectides are incorporated into the cells of ligand polypeptide, or amino acids 27-160, 1-160, 27-185, 1-185, or 27-185 of the ligand. The polymuclectides are incorporated into the cells of the vertebrate in vivo, and a prophylactically or therapeutically or therapeutically effective amount of Flt-3 ligand and 1 or more antigens or cytokines is produced in vivo. Pharmaceutical compositions comprising the polymuclectides are useful for suppressing tumour growth in a mammal. The polymuclectides are useful for suppressing tumour growth in a mammal. The cumour is melanoma, glioma or lymphoma, particularly B-cell lymphoma. The prophylactic and/or therapeutic treatment of: (a) bacterial (e.g. Bacillus infections), viral (e.g. bepatitis B and cuntominune diseases (e.g. rheumatoid arthritis and ostecarthritis); (c) cancer, and (d) Aujeszky's disease in pigs. Various other examples of these diseases are given in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunogenic compositions comprising Flt-3 ligand encoding polynucleotide and one or more antigen, or cytokine encoding polynucleotides, useful for suppressing tumor growth and for treating autoimmune diseases (e.g. rheumatoid arthritis).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 2; Page 132-133; 149pp; English.
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31-JUL-2000; 2000WO-US020679.
                                                                                      99US-0146170P.
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Matches 235; Conservative
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                                                                                                                                                                        (VICA-) VICAL INC.
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                                                                                      30-JUL-1999;
                                                                                                                                                                                                                                                                    Hermanson GG;
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Tumour; cancer; dendritic cell mobilisation factor; tumour-killing agent; dendritic cell maturation agent; T cell enhancing factor; skin cancer; antigen-specific T cell; prostate cancer; liver cancer; bone tumour; brain.tumour; spinal cord tumour; cervical intraepithelial neoplasia; actinic keratosis; dendritic cell maturation stimulator; cytostatic; dendritic cell activator; T cell enhancer; human; Flt3L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a new method for treating a tumourbearing subject. The method involves administering a combination of 2 to 5 agents comprising dendritic cell mobilisation factor, dendritic cell maturation agent, tumours tumour-killing agent, T cell enhancing factor or activated, antigen-specific T cells. The method is useful for treating tumours or cancers in a subject e.g. skin cancer, prostate cancer, liver cancer, tumours of the bone, brain or spinal cord, actinic keratosis, or cervical intraepithelial neopleasa. The present amino acid sequence represents the human Flish protein that was used in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 ASNLQDEELCGGLWRLVLAQRWMERLKTVAGSKWQGLLERVNTEIHFVTKCAFQPPPSGL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treating an individual with tumors or cancers, e.g. liver cancer or tumor, by administering a combination of dendritic cell populations, cell enhancing factors and activated, antigen-specific T cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                  23-OCT-2001; 2001WO-US046254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-OCT-2000; 2000US-0242868P
                    29-NOV-2002 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lyman SD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-674891/72.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 235 AA;
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                                                                                                                                                                                                                                                                                        Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to treating an individual at risk for or suffering from infection with a pathogenic or opportunistic organism. The method involves administering a combination of two to five agents comprising:

(a) dendritic cell mobilisation factor; (b) dendritic cell maturation agent; (c) dendritic cell activated, antigen-specific T cells. The methods are useful for treating an individual at risk for or suffering from infection with a pathogenic or opportunistic organism, e.g. viruses (e.g. HIV), bacteria (e.g. M. tuberculosis), yeast, fingi (e.g. C. albicans) or protozoa (e.g. T. cruzi, which causes Chaga's disease). The methods are especially useful for treating an individual suffering from immunosuppression by useful for treating inflammations. In particular, the method is useful for treating inflammations, chickenpox, oral or genital harpes, monouncleosis, multifocal leukoencephalopathy, hepatitis, AIDS, T cell leukemia or T cell lymphoma. The activated antigen-presenting dendritic cells are useful as a vaccine adjuvant. The present sequence representic cell mobilisation factor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Treating an individual suffering from infection, e.g. inflammation, chickenpox or AIDS, by administering a combination of dendritic cell mobilization factor or maturation agent, T cell enhancing factor and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 APQPPLLLLLLLLPVGLLLLAAAWCLHWQRTRRRTPRPGEQVPPVPSPQDLLLVEH 235
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100.0%; Pred. No. 5.8e-109;
tive 0; Mismatches 0;
  tuberculostatic; cytostatic; human; Flt3L.
                                                                                                                                                                                                                                                                                                                                      Maliszewski CR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure, Page 37-38; 43pp; English.
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                                                                                                                                                                                                                                        02-NOV-2000; 2000US-0245721P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antigen-specific T cells.
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                                                                                                                                                                                                                                                                                     (IMMV) IMMUNEX CORP
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                                                   Homo sapiens
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Thomas EK;
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                                                                                                                                                                                                                                                                                                               The present invention relates to a method of producing a population of activated, Cryptococcus neoformans antigen-presenting dendritic cells, comprising causing the obtained dendritic cells to present the antigen and maturing the dendritic cells. The activated, C. neoformans antigen expressing dendritic cells are useful for treating, or as vaccines or vaccine adjuvants against, C. neoformans infection, or for generating antigen-specific T cells. The present sequence is a human protein shown in the exemplification of the invention
                                                                                                                                                                                                                                            Producing a population of activated, Cryptococcus neoformans antigen-
presenting dendritic cells for preventing or treating C. neoformans
infection comprises causing the obtained dendritic cells to present the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ASNIQDEELCGGLWRLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCL
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0
                            C neoformans antigen expressing dendritic cell related protein
                                                                                                                                                                                                                                                                                                                                                                                                                               Length 235;
                                                Human, fungicide, fungal infection, dendritic cell, antigen;
Cryptococcus neoformans, vaccine, immunostimulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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100.0%; Pred. No. 5.8e-109;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                 Disclosure; Page 25-26; 32pp; English
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                                                                                                                                                                04-JAN-2001; 2001US-0259653P
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           (first entry)
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                                                                                                                                                                                   (IMMV) IMMUNEX CORP
                                                                                                                                                                                                                           WPI; 2002-674896/72
                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                     WO200266053-A2
                                                                                  Homo sapiens
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16-MAY-2003
          22-NOV-2002
                                                                                                                                                                                                        Thomas EK;
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The sequences given in AAG79949-50 are included in the scope of the invention as they show high levels of similarity to the secreted poptide of the invention. The secreted protein is related to the tyroaine kinase receptor ligand subfamily. This protein effects protein phosphorylation. The subtamily of the protein and specific assays are protein effects protein phosphorylation. The human secreted peptides are useful in substantial and specific assays. The human secreted peptides are useful in substantial and specific assays are traded to functional information of the peptide sequences, to raise are useful so to elicit immune response, as reagents in assays that determine the levels of protein in sypressed. The peptides and the corresponding protein is expressed. The peptides and chemical intermediates in biological assays, tissue typing and pharmacogenomic analysis. The nucleic acid molecules are useful as constructing recombinant vectors, and expressing antigenic portions of the protein. The peptide and nucleic acid molecules are useful in the identification of therapeutic proteins and may serve as models or targets of or the development of human therapeutic acid molecules are useful in the secreted peptide and nucleic acid molecules are useful in the contracting receptionent of human therapeutic acid molecules are useful in the secreted peptide activity in cells and tissues that express the secreted peptide, such as in kidney, blood, lung, brain glioblastomas, prostate, colon or leukocytes. (Updated on 23-OCT-2003 to standardise OS field)
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Gene, secreted, tyrosine kinase receptor ligand, subfamily;
phosphorylation; kidney; blood; lung; brain glioblastoma; prostate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated human secreted peptide and nucleic acids, useful for development of human therapeutics and diagnostic compositions, dru screening assays, tissue typing and pharmacogenomic analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APOPPILLILLILPVGLILLAAAMCLHWORTRRTPRPGEGVPPVPSPQDLLLVEH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 1242; DB 6; Length 235; 100.0%; Pred. No. 5.8e-109; ive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ä
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Best Local Similarity 100.
Matches 235; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ceccardi T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-267895/26
                                                                                                          colon; leukocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 235 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (PEKE ) PE CORP
                                                                                                                                                                                                                                                                            WO2003002138-A1
                                                                                                                                                                                    unidentified
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ABG74239
ID ABG7
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Secreted human protein comparison protein #1.

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The invention relates to an antibody that binds specifically to human fit -3 ligand. The antibodies that are immunoreactive with fit-3 ligand are useful in ELISA to measure concentration of fit2-1 in plasma or serum, and predicting the status of a disease such as Fanconi's anaemia, acquired aplastic anaemia, or myelodysplastic syndromes. The present sequence represents the amino acid sequence of the human fit3-ligand.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antibodies specifically binding to human flt-3 ligand, useful in immunoassays for measuring concentration of flt3-L in plasma or serum, for predicting the status of a disease such as Fanconi's anemia or acquired aplastic anemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MIVLAPAWSPITYLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MIVLAPANSPITYLLILILISISILIOOPERORESPESSOFAVKIRELSDYLLODYPVIV
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                                   121 ŘFVQTNÍSKLÍQETSEQLVALKPWITRQNFSRCLELQCÓPDSSTLPPPWSPRPLEATAPT
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                                                                               235
                                                                             181 APOPPLILLLILLPVGLLLLAAAWCLHWORTRRRTPRFGEOVPPVPSPOLLLVEH
                                                                                                               181 APOPPELELELEPVGLELLAAAWCLHWQRTRRRTPRPGGGVPPVPSPQDELLVEH
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                                                                                                                                                                                                                                                                                                                                                                            anaemia; acquired aplastic anaemia;
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llarity 100.0%; Pred. No. 5.8e-109;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 5; SEQ ID NO 6; 17pp; English.
                                                                                                                                                                                                                       ADD22874 standard; protein; 235 AA
                                                                                                                                                                                                                                                                                                                                                                              flt-3 ligand; Fanconi's anaemia;
myelodysplastic syndrome; human.
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930S-00111758.
930S-00162407.
94US-00209502.
95US-00444632.
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N-PSDB; ADD22873.
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les 235; Conserv
                                                                                                                                                                                                                                                                                                                                          Human flt3-ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 235 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-JUN-1996;
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25-AUG-1993;
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                                                                                                                                                                                                                                                               ADD22874;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to an antibody that binds to mouse flt-3 ligand (flt-3 L) encoded by the cDNA insert in vector sfHAV-EO410 in Escherichia coll DHHDD cells having American Type Culture Collection (ATTC) Accession No. 69286, where the ligand comprises the truncated extracellular domain of mouse flt-3 L. The methods and compositions are useful for screening, diagnostic and bological assays in disorders having elevated serum levels of flt-3 ligand, such as cancer, cytopeania, myelodysplastic syndromes, stem cell disorders, refractory anaemia, chronic playcythaenia, plastic anaemia, Fanconi's anaemia and plycythaenia. Flt3-L is also useful in allogeneic, syngeneic or autologous bone marrow transplants in patients undergoing cytoreductive therapies, as well as cell expansion. Flt3-L is also useful in gene therapy and progenitor and stem cell mobilisation systems. The present sequence represents human flt-3 L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antibody binding mouse flt-3 ligand, useful for screening, diagnostic and biological assays in disorders with elevated serum levels of flt-3 ligand, such as Fanconi's and myelodysplastic syndrome, aplastic and
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                                                                                                                       Human; flt-3 ligand, flt-3 L, stem cell disorder; cancer; cytopaenia; myelodysplastic syndrome; gene therapy refractory anaemia; chronic myelomonocytic leukaemia; aplastic anaemia; Fanconi's anaemia; plycythaemia; antibody; bone marrow transplant; cytoreductive therapy; cell expansion; stem cell mobilisation.
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Pred. No. 5,8e-109;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 4; Page 15-16; 18pp; English
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93US-001106463.
93US-00116177.
94US-00209502.
95US-00443545.
95US-00669632.
                                                                                                                                                                                                                                                                                                                                                                    2002US-00095449
                                                                                          Human Flt-3 ligand, Flt-3 L.
                                                      entry)
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Best Local Similarity 100.
Matches 235; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (LYMA/) LYMAN S D. (BECK/) BECKMANN M P.
                                                    (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-209211/20
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                                                                                                                                                                                                                                                                                          US2002160004-Al.
                                                                                                                                                                                                                                                       Homo sapiens.
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                                                    16-APR-2003
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03-DEC-1993
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              ABG74239;
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61 ASNIQDEBLCGGLWRLVLAQRWWERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCL 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to immunizing a subject by administering Plt3-ligand to a subject, optionally administering an auxiliary molecule, and administering a vaccine to the subject, where the vaccine comprises an an adjuvant. The methods and compositions of the present invention are useful for preventing and/or treating viral or bacterial infections, cancer, allergies, and fungal, parasitic, rickettsial and protozoal infections. The presents sequence human Flt3-ligand.
61 ASNLQDBELCGGLWRLVLAQRWMERLKTVAGSKWQGLLERVNTBIHFVTKCAFQPPPSCL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Immunization protocols to enhance immune responses against vaccine antigens using an Flt3-ligand, useful for preventing or treating viral bacterial infections, cancer, allergies, and fungal, parasitic and protozoal infections.
                                                  121 RFVQTNISRLLQBISBQLVALKPWITRQNFSRCLBLQCQPDSSTLPPPWSPRPLBATAPT
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                                RFVQTWISKLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPPWSPRPLEATAPT
                                                                                                                 181 APOPPLILLILLEPVGLILLIAAAMCLHWQRTRRRTPRPGGGVPPVPSPQDLLLVEH 235
                                                                                              181 APQPPLILLILLEPVGLILLAAAWCLHWQRTRRRTPRRGEQVPPVPSPQDLLLVEH
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llarity 100.0%; Pred. No. 5.8e-109;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                            Flt3-ligand; vaccine; cancer; infection; human
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                                                                                                                                                                                                               ADE48117 standard; protein; 235
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19-NOV-2002; 2002US-0427835P.
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                                                                                                                                                                                                                                                                             (first entry)
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hes 235; Conserv
                                                                                                                                                                                                                                                                                                             Human Flt3-ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 235 AA;
                                                                                                                                                                                                                                                                                                                                                                                                              WO2003083083-A2.
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                                                                                                                                                                                                                                                                             29-JAN-2004
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Matches
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                                                                                                                                                                                                                                                                                                                             Cancer; dendritic cell; tumour-specific immune response; tumour growth; tumour incidence; tumour rejection; Flt3-ligand; haematopoietic progenitor; stem cell; immune response; cytostatic; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ASNLODEELCGGLWRLVLAQRWMERLXTVAGSKWQGLLERVNTEIHFVTKCARQPPPSCL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to methods for treating cancer, increasing the number of dendritic cells, augmenting a tumour-specific immune response, reducing tumour growth, reducing tumour incidence, and increasing tumour rejection in a patient having cancer. The method involves administering a composition comprising Flt3-ligand. Flt3-ligand can generate large numbers of dendritic cells from haematopoietic progenitor and stem cells. Flt3-ligand can be used to augment an immune response in vivo. The methods of the invention are useful for treating cancer. The present sequence represents human flt3-ligand.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treating cancer, increasing the number of dendritic cells, augmenting tumor-specific immune response, and increasing tumor rejection in a patient having cancer by administering a composition comprising Flt3-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MTVLAPAWSPTTYLLLLLLSSGLSGTQDCSPQHSPISSDFAVKIRELSDYLLQDYPVTV
                    RFVQTNISRLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPPWSPRPLEATAPT
                                                121 RFVQTNISRLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPPWSPRPLEATAPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MIVLAPAWSPITYLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVIV
                                                                                 235
                                                                                                    181 APQPPILLILILILPVGLILLAAAMCLHWQRTRRRTPRPGEQVPPVPSPQDLLLVEH 235
                                                                                  181 APQPPLLLLLLLPVGLLLLAAAWCLHWQRTRRRTPRRGEQVPPVPSPQDLLLVEH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Maliszewski CR;
                                                                                                                                                                                                                                                                                                Amino acid sequence for human flt3-ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 12; SEQ ID NO 2; 15pp; English.
                                                                                                                                                                                                  standard; protein; 235 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Miller RE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95US-00539142.
96US-00725540.
98US-00154903.
99US-00444027.
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                                                                                                                                                                                                                                                                 (first entry)
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35; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (IMMV ) IMMUNEX CORP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 235 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                               US2003113341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-OCT-1996;
17-SEP-1998;
19-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-OCT-1995;
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Matches 235;
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                                                                                                                                                                                                                                ADD80915;
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                    121
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MIVLAPAWSPITYLLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTV

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The present invention describes a nucleic acid sequence (I) which encodes a polypeptide consisting of TAFIB, MACS, UVRAG, ELAVIJ, TCF6L1, ABCF1, CC AMM2, CHD2, FL J11053, KIAA1052, ACWES or HT001 having a frameshift content of the present invention.

The content of the present invention.

The present sequence replaces a protein used in the content of the present invention.
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                      181 APOPPLILILILIPVGLILILAAAWCLHWQRTRRRTPRPGEGVPPVPSPQDLILVEH 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New nucleic acid, useful in preparing a composition for diagnosing treating disorders associated with frameshift mutations in coding microsatellite regions, e.g., neurodegenerative disorder, vascular disease or cancer.
                                                                                                                                                                                                                                                                                 frameshift mutation, microsatellite, cytostatic; neuroprotective, vasotropic; vaccine, gene therapy; neurodegenerative disorder;
181 APQPPLLLLLLLLDAAAWCLHWQRTRRRTPRGEQVPPVPSPQDLLLVEH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Linnebacher M, Woerner S;
                                                                                                                                                                                                                                               Microsatellite related FTL3L wt ORF amino acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Doeberitz M, Gebert J,
Bork P, Yuan YP;
                                                                                                                                  ADE80752 standard; protein; 235 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 3; Fig 2; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-APR-2002; 2002EP-00008771.
18-APR-2002; 2002EP-00008773.
18-APR-2002; 2002EP-00008774.
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                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                        vasotropic; vaccine; gene
vascular disease; cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MIMM-) MIM LAB AG.
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                                                                                                                                                                                                                                                                                                                                                                                                    WO2003087162-A2.
                                                                                                                                                                                                           29-JAN-2004
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                                                                                                                                                                       ADE80752;
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The sequences given in AAG79949-50 are included in the scope of the invention as they show high levels of similarity to the secreted peptide of invention as they show high levels of similarity to the secreted peptide coff the invention. The secreted protein is related to the tyrosine kinase receptor ligand subfamily. This protein effects protein phosphorylation. The human secreted peptides are useful in substantial and specific assays related to functional information of the peptide sequences, to raise artibodies or to elicit immune response, as reagents in assays that determine the levels of protein is expressed. The peptides and the antibodies are useful in drug screening assays, tissue typing and the antibodies are useful in drug screening assays, tissue typing and pharmacogenomic analysis. The nucleic acid molecules are useful as probes, primare and chemical intermediates in biological assays, for constructing recombinant vectors, and expressing antigenic portions of the protein. The peptide and nucleic acid molecules are useful in the identification of therapeutic proteins and may serve as models or targets in the development of human therapeutic agents that modulate human secreted peptide activity in cells and tissues that express the secreted peptide, such as in kidney, blood, lung, brain glioblastomas, prostate,
                                           120
                                                                                                                      121 RFVQTNISRLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPPWSPRPLEATAPT 180
                                                                                                                                                            180
    9
                                                                    61 ASNLODEELCGGLWRLVLAQRWERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCL
                                                                                                                                             New isolated human secreted peptide and nucleic acids, useful for the development of human therapeutics and diagnostic compositions, drug screening assays, tissue typing and pharmacogenomic analysis.
    1 MIVLAPAWSPITYLLILLISSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVIV
                                           ASNLQDEELCGGLWRLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCL
                                                                                                                                                                                                      235
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gene, secreted; tyrosine kinase receptor ligand; subfamily;
phosphorylation; kidney; blood; lung; brain glioblastoma; prostate;
                                                                                                                                                                                                                        181 APQPPLILLILLINAAAWCLHWQRTRRRTPRGEQVPPVPSPQDLLLVBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Secreted human protein comparison protein #2.
                                                                                                                                                                                                                                                                                                                                           AAG79950 standard; protein; 235 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Fig 2B; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ladunga I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-JUN-2002; 2002WO-US020172.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-JUN-2001; 2001US-00891498.
                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
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16-MAY-2003
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Length 235; Indels

Query Match

100.0%; Score 1242; DB 7;
Best Local Similarity 100.0%; Pred. No. 5.8e-109;
Matches 235; Conservative 0; Mismatches 0;

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                                                                                                                                                                                                                                                                                                     ASNLQDEELCGGLWRLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPRSCL
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                                                                                      Score 1237; DB 6; Length 235;
Pred. No. 1.7e-108;
0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Flt3 ligand; tyrosine kinase receptor ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human S86/S109 Flt3 ligand peptide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (SCHE ) SCHERING CORP. (INRM ) INST NAT SANTE & RECH MEDICALE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hannum CH, Lee FD, Birnbaum D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR66175 standard; peptide; 235
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93US-00089263.
93US-00092549.
93US-00105340.
93US-00152391.
93US-00152111.
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                                                                                               Query Match
Best Local Similarity 99.6%;
Matches 234; Conservative (
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(first entry)
colon or leukocytes.
                                                   Sequence 235 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-MAY-1993;
07-JUL-1993;
16-JUL-1993;
13-AUG-1993;
24-AUG-1993;
03-DEC-1993;
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10-AUG-1995
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New ligand for the Flt3 tyrosine kinase receptor - and related nucleic acid, vectors, host cells and antibodies, useful for treating abnormal cell physiology and proliferation, e.g. cancer, also for diagnosis and drug screening.

WPI; 1995-006787/01. N-PSDB; AAQ79642.

was

A cDNA library from the human stromal cell line 295V48, in pME185, wa screened with an 800 bp fragment derived from mouse clone Tl18. This fragment encompasses the coding region conserved between two mouse clones, T118 and T110. Approx. 20 positive clones were selected and

Claim 11; Page 76-77; 90pp; English.

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partially sequenced. Two clones, S86 and S109, were found to be approx. 75% homologous to the mouse clones over the first 163 AAs. Clone S86 continued to show homology to T110 until the stop codon, although to a lesser degree, for an overall homology of 66%. Clones T118 and S109 do not show homology to each other or to the other clones after mouse residue 163 (human residue 160). An additiona mouse clone designated MB8 has a 29 AA insert at the junction between the common and divergent portions of the mouse ligand. (Updated on 25-MAR-2003 to correct PN field.)
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                                                                                                                                                                                                                                                                                                                  1 MIVLAPAWSPITYLLILLISSGISGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVIV
                                                                                                                                                                                                                                                                                                                                                                                             61 ASNIQDEELCGGLWRIVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCL
                                                                                                                                                                                                                                                                                                                                                                                                                    1 MTVLAPAWSPTTYLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTV
                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                               Length 235;
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99.5%; Score 1236; DB 2;
Best Local Similarity 99.6%; Pred. No. 2.1e-108;
Matches 234; Conservative 0; Mismatches 1;
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US-08-994-468-6

US-08-994-468-6

Sequence 6, Application US/08994468

Publication No. US20030148516A1

Publication No. US20030148516A1

GENERAL INFORMATION:

BECKMEAN, Stewart D.

TITLE OF INVENTION:

NUMBER OF SEQUENCES:

CORRESPONDENCE ADDRESS:

ADDRESSEE: Stephen L. Malaska, Immunex Corporation
STREET: 51 University Street

CITY: Search Stephen Street

CITY: Search Nashington

COUNTRY: US

ZIP: 880.1

COMPUTE: PROPA disk

COMPUTE: Apple Macintosh

COMPUTE: Apple Macintosh

CORRENT APPLICATION NUMBER: US/08/994,468

FILING DATE: 19-Dec-1997

CLASSIFICATION **CHAROW**

APPLICATION NUMBER: 08/162,407

FILING DATE: AUGUST 25, 1993

APPLICATION NUMBER: 08/162,407

FILING DATE: AUGUST 25, 1993

APPLICATION NUMBER: 08/106,463

FILING DATE: MAGUST 25, 1993

APPLICATION NUMBER: 08/106,463

FILING DATE: MAGUST 25, 1993

APTORNEY AND AUGUST 25, 1993
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Sequence 6, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 2, Appli
Sequence 6, Appli
Sequence 6, Appli
Sequence 1, Appli
Sequence 11, Appli
Sequence 114, Appli
Sequence 10, Appli
Sequence 11, Appli
Sequence 12, Appli
                                                                                                                                      April 8, 2004, 17:07:57; Search time 47.2554 Seconds (without alignments) 1307.583 Million cell updates/sec
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                                                                                                                                                                                                                             US-08-994-468-6
1242
1 MTVLAPANSPTTYLLILILIL.......RPGEQVPPVPSPQDLLLVEH 235
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1: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/NSO6_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

8: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

17: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

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                      GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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US-10-055-449-6

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US-09-448-378-1
US-09-983-806-6
US-09-904-536-1
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Maximum Match 100%
Listing first 45 summaries
                                                                                                    - protein search, using sw model
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Gapop 10.0 , Gapext
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Maximum DB seq length: 200000000
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Query
Match 1
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Perfect score:
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NAME: Malaska, Stephen L. REGISTRATION NUMBER: 32,655 REFERENCE/DOCKET NUMBER: 2813-C

Result No.

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Sequence 49, Appl
Sequence 2, Appli
Sequence 31, Appl
Sequence 31, Appli
Sequence 19, Appli
Sequence 19, Appli
Sequence 64, Appli
Sequence 64, Appli
                       Sequence 17, Appl Sequence 11, Appl Sequence 15, Appl Sequence 16, Appl Sequence 16, Appl Sequence 7, Appl Sequence 7, Appl Sequence 44, Appl Sequence 17, Appl Sequence 23, Appl Sequence 24, Appl Sequence 24, Appl Sequence 25, Appl Sequence 26, Appl
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US-10-304-946-14
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RESULT 3
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100.0%; Score 1242; DB 9;
Best Local Similarity 100.0%; Pred. No. 1.1e-102;
Matches 235; Conservative 0; Mismatches 0;
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ilarity 100.0%; Pred. No. 1.1e-102;
Conservative 0; Mismatches 0;
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Patent No. US20020034517A1
GENERAL INFORMATION:
TITLE OF INVENTION: Dendritic Cell Stimula:
FILE REFERENCE: 2838-D
CURRENT APPLICATION NUMBER: US/09/448,378
CURRENT FILING DATE: 1999-11-23
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin version 3.0
SERIOTH: 235
                                    INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS: SEQUENCE CHARACTERISTICS: TYPE: amino acid TOPE: amino acid TOPE: amino acid TOPE: application sequence DESCRIPTION: SEQ ID NO: 6: US-08-994-468-6
     TELECOMMUNICATION INFORMATION
                         TELEPHONE: (206) 587-04.
TELEFAX: (206) 233-0644
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Matches 235; Conserv
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                                                                                                                                                                                                     ADDRESSEE: Stephen L. Malaska, Immunex Corporation
STREET: 51 University Street
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Sequence 6, Application US/09983806
Patent No. US20020107365A1
GENERAL INFORMATION: Stewart D. APPLICANT: Lyman, Stewart D. TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors NUMBER OF SEQUENCES: 8 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 1242; DB 9;
100.0%; Pred. No. 1.1e-102;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh 7.0.1
SOFTWARE: Microsoft Word, Version #5.1
CURRENT APPLICATION DATA: Word, 983,806
FILING DATE: 25-Oct-2001
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DAYS:
APPLICATION NUMBER: US/08/444,626
FILING DATE: 19-MA-1995
APPLICATION NUMBER: US 08/162,407
FILING DATE: 03-DEC-1993
APPLICATION NUMBER: 08/11,758
FILING DATE: August 25, 1993
APPLICATION NUMBER: 08/106,463
FILING DATE: August 12, 1993
APPLICATION NUMBER: 08/06,394
FILING DATE: MAY 24, 1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Malaska, Stephen L.
REGIGENATION WNBER: 32,655
REFERENCE/DOCKET NUMBER: 2813-C
TELECOMMUNICATION INFORMATION:
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
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                                                                                                                                                                                                                                                                                                                                  ZIP: 98101
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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TYPE: amino acid
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INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                        CITY: Seattle
STATE: Washington
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Best Local Similarity 100.
Matches 235; Conservative
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US-10-643-384-2
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| Sequence 2, Application US/10643384
| Publication No. US20040037845A1
| GENERAL INFORMATION:
| APPLICANT: Brasel, Kenneth A. APPLICANT: Lyman, Stewart D. APPLICANT: Lyman, Stewart D. APPLICANT: Lyman, Stewart D. APPLICANT: Maraskovsky, Eugene
| APPLICANT: Lynch, David H. J. APPLICANT: Morenna, Hilary J. APPLICANT: Morenna, Hilary J. APPLICANT: Morenna, Hilary J. APPLICANT: Lynch, David H. J. TILE OF INVENTION: THE USE OF FLT3-LIGAND IN THE TREATMENT OF INFECTION
| FILE REPERENCE: 2896-H
| CURRENT APPLICATION NUMBER: US/10/44,027
| PRIOR FILING DATE: 1999-11-19
| PRIOR FILING DATE: 1999-11-19
| PRIOR FILING DATE: 1996-10-03
| PRIOR FILING DATE: 1996-10-03
| PRIOR FILING DATE: 1996-10-03
| PRIOR FILING DATE: 1995-10-04
| NUMBER OF SEQ ID NOS: 2
| SOFFWARE: Patentin version 3.2
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100.0%; Score 1242; DB 9; Length 235;
Best Local Similarity 100.0%; Pred. No. 1.1e-102;
Matches 235; Conservative 0; Mismatches 0; Indels 0.
                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
TITLE OF INVENTION: FLIS-L MUTANTS AND METHODS OF USE
FILE REPERBENCE: 0326.0028
CURRENT APPLICATION MMERR: US/9/904,536
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: PRIOR APPLICATION: 09/109,100
PRIOR PRIME OF SEQ ID NOS: 20
SOFTWARE PATENT PATE 1999-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE PATENT P
                                                                                                                           Sequence 1, Application US/09904536; Patent No. US20020111475A1
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ORGANISM: Homo sapiens
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                                                                                                                    1 MIVLAPAMSPITYLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTV
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                                                               0; Gaps
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Query Match
Best Local Similarity 100.0%; Pred. No. 1.1e-102;
Matches 235; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Beckmann, M. Patricia
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCES. ADDRESS: ADDRESSE: Stephen L. Malaska, Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER ASALABLE FORDY disk
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh 7.0.1
SOFTWARE: Microsoft Word, Version #5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/095,449
FILING DATE: 13-Mar-2002
CLASSIFICATION TARE:
APPLICATION NUMBER: US/609,692
FILING DATE: 24-UN-1996
APPLICATION NUMBER: US/608,62,407
FILING DATE: December 3, 1993
APPLICATION NUMBER: US/608,624
APPLICATION NUMBER: US/608,635
FILING DATE: August 25, 1993
APPLICATION NUMBER: 08/116,463
FILING DATE: August 25, 1993
APPLICATION NUMBER: 08/106,463
FILING DATE: August 12, 1993
APPLICATION NUMBER: 08/106,463
FILING DATE: August 12, 1993
APPLICATION NUMBER: 08/106,463
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ATTORNEY/AGENT INFORMATION:
NAME: MAIASKA, Stephen L.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2613-C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/10095449
Publication No. US20020160004A1
GENERAL INFORMATION:
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TYPE: amino acid
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INFORMATION FOR SEQ ID NO: 6:
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COMPUTER READABLE FORM:
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STATE: Washington
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: protein
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TYPE: PRT
CRGANISM: Homo sapiens
US-10-401-364-1
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US-10-314-035-6
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Sequence 2, Application No. US2030113341A1

SEQUENCE INFORMATION:

APPLICANT: Lynch, David H.

APPLICANT: Miller, Robert B.

CURRENT PAPLICATION THE USE OF PLT3-LIGAND IN THE TREATMENT OF CANCER

FILE REPERBRUCE: 2836-F

CURRENT FILING DATE: 1999-11-19

PRIOR FILING DATE: 1999-11-19

PRIOR FILING DATE: 1999-11-19

PRIOR FILING DATE: 1999-10-13

PRIOR PLING DATE: 1999-10-13

PRIOR FILING DATE: 1999-10-13

PRIOR FILING DATE: 1999-10-13

PRIOR FILING DATE: 1999-10-03

PRIOR FILING DATE: 1999-10-03

PRIOR FILING DATE: 1999-10-03

PRIOR FILING DATE: 1999-10-03

SOFTWARER OF SEQ ID NOS: 2

SOFTWARER PAPENTING NOWER: 1995-10-04

SOFTWARE: PAPENTING NOWER: 1995-10-04

SOFTWARE: PAPENTING NOWER: 1995-10-04
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                                                                                    Length 235;
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Best Local Similarity 100.0%; Score 1242; DB 14;
Best Local Similarity 100.0%; Pred. No. 1.1e-102;
Matches 235; Conservative 0; Mismatches 0;
                                                                                  Query Match
100.0%; Score 1242; DB 13;
Best Local Similarity 100.0%; Pred. No. 1.1e-102;
Matches 235; Conservative 0; Mismatches 0;
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US-10-095-449-6
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US-10-314-U3-b

gequence 6, Application US/10314035

publication No. US2003015706941

GENERAL INFORMATION:
APPLICANT: BECKWANN, M. Patricia
APPLICANT: BECKWANN, M. Patricia
APPLICANT: BECKWANN, M. Patricia
TITLE OF INVENTION: METHODS OF USING FLT3-LIGAND IN HEMATOPOIETIC CELL TRANSPLANTATI:
TITLE OF INVENTION: METHODS OF USING FLT3-LIGAND IN HEMATOPOIETIC CELL TRANSPLANTATI:
CURRENT APPLICATION NUMBER: US/10/314,035
CURRENT APPLICATION NUMBER: US 08/994,468
PRIOR PILING DATE: 1997-12-19
PRIOR PILING DATE: 1997-05-11
PRIOR FILING DATE: 1994-05-11
SPRIOR FILING DATE: 1994-05-11
PRIOR FILING DATE: 1994-05-11
SPRIOR FILING DATE: 1994-05-11
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; Bublication No. US20040022760A1
; Bublication No. US20040022760A1
; Bublication No. US20040022760A1
; APPLICANT: Maliazewski, Charles R.
; APPLICANT: Maliazewski, Charles R.
; TITLE OF INVENTION: METHODS OF USING FLT3-LIGAND IN IMMUNIZATION PROTOCOLS
; TITLE OF INVENTION: METHODS OF USING FLT3-LIGAND IN IMMUNIZATION PROTOCOLS
; TILE REFERENCE: 3399-B
; CURRENT APPLICATION NUMBER: US 60/368,263
; PRIOR APPLICATION NUMBER: US 60/368,263
; PRIOR FILING DATE: 2002-03-26
; PRIOR FILING DATE: 2002-11-19
; NUMBER OF SEQ ID NOS: 4
; SOFFWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 235
; MUMBER 1.
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Best Local Similarity 100.0%; Pred. No. 1.1e-102;
Matches 235; Conservative 0; Mismatches 0; Indels 0;
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APPLICANT: WALTER, SARAH
APPLICANT: WALTER, SARAH
APPLICANT: WALTER, SARAH
APPLICANT: CHERRINGTON, JULIE
APPLICANT: SCHILLING, JIM
TITLE OF INVENTION: MOVEL BIOMARKERS OF TYROSINE KINASE INHIBITOR EXPOSURE
TITLE OF INVENTION: MOVEL BIOMARKERS OF TYROSINE KINASE INHIBITOR EXPOSURE
TITLE OF INVENTION: MOVEL BIOMARKERS OF TYROSINE KINASE INHIBITOR EXPOSURE
TITLE OF INVENTION: MOVEL BIOMARKERS OF 4464
CURRENT FILING DATE: 2003-05-19
PRIOR PELLING DATE: 2003-05-17
PRIOR PELLING DATE: 2003-02-24
PRIOR FILING DATE: 2003-02-24
PRIOR FILING DATE: 2003-02-24
NUMBER OF SEQ ID NOS: 185
SOCIETA NO 60
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Sequence 10. Application US/09904536

Sequence 10. Decolo11475A1

GENERAL INFORMATION:

APPLICANT: Graddis, Thomas J.

APPLICANT: Graddis, Thomas J.

APPLICANT: McGRew, Jeffrey T.

TITLE OF INVENTION: FLT3.L MUTANTS AND METHODS OF USE

FILE REFERENCE: 03260.0028

CURRENT PFLING DATE: 2001-07-16

PRIOR PLING DATE: 1999-07-02

NUMBER OF SEQ ID NOS: 20

SOFTWARE: PALCATION: 09/109,100

SOFTWARE: PALCATION VEY: 2.1

SOFTWARE: PALCATION: 20

SOFTWARE: 212
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Pred. No. 3.7e-102;
0; Mismatches 1;
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90.5%; Score 1124; DB 9;
Best Local Similarity 100.0%; Pred. No. 3.2e-92;
Matches 211; Conservative 0; Mismatches 0;
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                                                      MANNING, WILLIAM
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Best Local Similarity 99.6'
Matches 234; Conservative
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CORGANISM: Homo sapiens
US-09-904-536-10
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TYPE: PRT

CRGANISM: Homo sapiens
US-10-440-464-60
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US-09-904-536-10
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| Sequence 174, Application US/10116275
| Publication No. US20030211476A1
| GENERAL INFORMATION:
| APPLICANT Elan Pharmaceutical Technology
| APPLICANT Elan Pharmaceutical Analysis of Peyer's Patches and Methods and TITLE OF INVENTION: Compositions Targeting Peyer's Patches and Methods and TITLE OF INVENTION: Compositions Targeting Peyer's Patches and Methods and TITLE OF INVENTION NUMBER: US/10/116,275
| CURRENT APPLICATION NUMBER: US/10/116,275
| CURRENT PILING DATE: 2002-10-04
| WIMBER OF SEQ ID NOS: 349
| SOFTWARE: PatchIn version 3.1
| BENGTH: 235
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Query Match 100.0%; Score 1242; DB 16; Length 235; Rest Local Similarity 100.0%; Pred. No. 1.1e-102; Matches 235; Conservative 0; Mismatches 0; Indels 0;
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99.5%; Score 1236; DB 15; Length 235;
Best Local Similarity 99.6%; Pred. No. 3.7e-102;
Matches 234; Conservative 0; Mismatches 1; Indels 0
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US-10-116-275-174
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; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-904-536-9
                                                                                                               Similarity
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Best Local Simil
Matches 208;
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US-09-904-536-12
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                                         RLKTVAGSKMOGLLERVNTEIHFVTKCAFOPPPSCLRFVQTNISRLLQETSEQLVALKPW 144
                                                                         62 RLKTVAGSKMOGLLERVNTEIHFVTKCAFOPPPSCLRFVOTNISRLLOETSEOLVALKPW 121
                                                                                                               145 ITRONFSRCLELQCQPDSSTLPPPWSPRPLEATAPTAPQPPLLLLLLLLPVGLLLLAAAWC 204
                                                                                                                                     122 ITRONESRCLELOCOPDSSTLPPPWSPRPLEATAPTAPOPPLILLILLFPVGLILLAAAWC 181
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 SGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWME 61
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US-09-904-536-9
is Sequence 9, Application US/09904536
patent No. US20020111475A1
j GENERAL INFORMATION:
i APPLICANT: Graddis, Thomas J.
i APPLICANT: McGrew, Jeffrey T.
i TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
i CURRENT PELING DATE: 1030/904,536
j CURRENT FILING DATE: 1999-07-02
prior APPLICATION NUMBER: PRIOR APPLICATION: 09/109,100
prior SEQ ID NOS: 20
scoftware: Patentin Ver. 2.1
seq ID NO 9
                                                                                                                                                                                                                                                                                                         Sequence 18. Application US/09904536
Fatent No. US20020111475A1
GENERAL INFORMATION:
APPLICANT: Graddis. Thomas J.
APPLICANT: Graddis. Thomas J.
TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
CURRENT APPLICATION NUMBER: 2001-07-16
PRIOR PILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: PRIOR APPLICATION: 09/109,100
PRIOR FILING DATE: 1999-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 18
                                                                                                                                                                                         205 LHWQRTRRRTPRPGEQVPPVPSPQDLLLVEH 235
                                                                                                                                                                                                                             LHWORTRRRTPRPGEQVPPVPSPQDLLLVEH 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        207 WORTRRETPREGEOVPEVPSPODLLLVEH 235
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
CRGANISM: Homo sapiens
US-09-904-536-18
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                                                                                                                                                                                                                                                                                     RESULT 13
US-09-904-536-18
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Best Local S:
Matches 209
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                                                                                                                                   1 TODCSFOHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAORWMERL
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                                                                                         27 TODCSFOHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERL
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Length 209;
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Patent No. US2002111475A1
GENERAL INFORMATION:
APPLICANT: McGrew, Jeffrey T.
TITLE OF INVENTION: FLID-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/904,536
CURRENT FILING DATE: 2001-07-16
PRIOR FILING DATE: 1999-07-02
NUMBER OF SEQ ID NOS: 20
NUMBER OF SEQ ID NOS: 20
SEQ ID NO 12
LENGTH: 209
                                               1; Indels
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99.5%; Pred. No. 5.5e-91;
cive 0; Mismatches 1;
Score 1110; DB 9;
Pred. No. 5.5e-91;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                          181 WORTRRIPRPGEQUPPVPSPQDLLLVEH 209
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Job time : 48.2554 secs
89.4%;
ilarity 99.5%;
Conservative
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Best Local Similarity 99.5
Matches 208; Conservative
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ORGANISM: Homo sapiens
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Sequence Seq

Sequence Sequence Sequence Sequence Sequence Sequence

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Sequence of Application US/08243545;
Patent No. 5554512;
GENERAL INFORMATION:
APPLICANT: Lyman, Stewart D.
APPLICANT: Beckmann, M. Patricia
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSE: Stephen L. Malaska, Immunex Corporation
STREET: 51 University Street
CITY: Seatth of CONTRESSERIES ADDRESS:
STATE: Washington
COUNTRY: US
COUNTRY: US
US-09-451-527-49
US-08-243-545-2
US-08-243-545-2
US-09-160-841-2
US-08-444-626-2
US-08-444-626-2
US-08-444-626-2
US-08-23-349B-7
US-08-22-409-31
US-09-109-100-100
US-09-109-100-100
US-09-109-100-100
US-08-317-5224-9
US-08-317-5228-9
US-08-317-5258-9
US-08-718-65-9
US-08-718-65-9
US-08-718-65-9
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COUNTRY:

COUNTRY:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: Apple Macintcsh
SOFTWARE: Microsoft Word, Version #5.1

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/243,545

FILING DATE: 11-MAY-1994
CLASSIPTCATION BATA:
APPLICATION NUMBER: 08/162,407
FILING DATE: 03-DEC-1993
CLASSIPTCATION: 435
FILING DATE: August 25, 1993
CLASSIPTCATION: 435
FILING DATE: August 12, 1993
CLASSIPTCATION: 435
FILING DATE: August 12, 1993
CLASSIPTCATION: 435
FILING DATE: August 12, 1993
CLASSIPTCATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Malaska, Stephen I.
REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 28,13-C
TELECOMMUNICATION INPORMATION:
THE TELECOMMUNICATION INPORMATION:
TELECOMMUNICATION INPORMATION:

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TELEX: 756822
INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS: LENGTH: 235 amino acids
      RESULT 1
US-08-243-545-6
      791.5
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Sequence 9, A
Sequence 12,
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1242
1 MIVLAPAWSPITYLLLLLLL......RPGEQVPPVFSPQDLLLVEH 235
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/cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
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/cgn2_6/ptodata/2/iaa/PcTUS_COMB.pep:*
/cgn2_6/ptodata/2/iaa/PcTUS_COMB.pep:*
                                       GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-322-409-49
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Maximum Match 100%
Listing first 45 summaries

    protein search, using sw model

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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length
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Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
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No.
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61 ASNIÇDBELCGGLWRLVIAQRWMERLKTVAGSKWQGLLERVNTEIHFVTKCAFQPPPSCL 120
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Sequence 6, Application US/09160841

Patent No. 6190655

GENERAL INFORMATION:

APPLICANT: Lyman, Stewart D.

APPLICANT: Lyman, M. Patricia

TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors

NUMBER OF SEQUENCES:

CORPESSEE: Stephen L.

STREET: 51 University Street

CITY: Seattle

STREET: 51 University Street

COUNTRY: US

ZIF: 98101

COMPUTER RADABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: RADABLE FORM:

MEDIUM TYPE: Ploppy disk

COMPUTER: RADABLE FORM:

MEDIUM TYPE: Ploppy disk

COMPUTER: Apple Macintosh 7.0.1

STREET: 98101

COMPUTER: Apple Macintosh 7.0.1

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COMPUTER: Apple Macintosh 7.0.1

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STREET: 
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100.0%; Score 1242; DB 2;
Best Local Similarity 100.0%; Pred. No. 3.9e-117;
Matches 235; Conservative 0; Mismatches 0;
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REGISTRATION NUMBER: 32,655
REFERENCE/DOCKET NUMBER: 2813-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEFAX: (206) 233-0644
                                               SEQUENCE CHARACTERISTICS:
IENGTH: 235 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-993-962-6
                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (20
TELEFAX: (206)
TELEX: 756822
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                                                                                                                                                                                    Length 235;
                                                                                                                                                                                                                                          0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6, Application US/08993962
Patent No. 5843423
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Lyman, Stewart D.
APPLICANT: Lyman, M. Patricia
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Stephen L. Malaska, Immunex Corporation
ADDRESSEE: Stephen L. Malaska, Immunex Corporation
                                                                                                                                                                             Query Match 100.0%; Score 1242; DB 1; Best Local Similarity 100.0%; Pred. No. 3.9e-117; Matches 235; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 7.0.1
SOFFWARE: Microsoft Word, Version #5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/993,962
FILING DATE: December 18, 1997
CLASSIFICATION: 424
PRIOR APPLICATION NUMBER: US/08/162,407
FILING DATE: December 3, 1993
APPLICATION NUMBER: US/08/162,407
FILING DATE: August 25, 1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/106,463
FILING DATE: August 25, 1993
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/106,463
FILING DATE: May 24, 1993
CLASSIFICATION NUMBER: 08/068,394
FILING DATE: May 24, 1993
CLASSIFICATION NUMBER: 2813-C
TASSIFICATION NUMBER: 2813-C
TELEDHOME: ALGERT NUMBER: 2813-C
TELEPHONE: (206) 233-0644
TELEFRA: 756822
, TYPE: amino acid
; TOPOLGGY: linear
; MOLECULE TYPE: protein
US-08-243-545-6
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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RESULT 6
US-08-444-626-6
; Sequence 6, Application US/08444626
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/09109100C; Patent No. 6291661
GENERAL INFORMATION:
APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
TILE REFERENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/109,100C
CURRENT FILING DATE: 1998-07-02; NUMBER OF SEQ. ID NOS: 20; SOFTWARE: PATENTIN Ver. 2.1
SEQ. ID NO. 1
                                                                                                                                                                          Query Match 100.0%; Score 1242; DB 3; Best Local Similarity 100.0%; Pred. No. 3.9e-117; Matches 235; Conservative 0; Mismatches 0;
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US-08-669-692-6
; Sequence 6, Application US/08669692
; Patent No. 6630143
                                          235 amino acids
amino acid
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                                           // MOLECULE TYPE: protein US-09-160-841-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
CORGANISM: Homo sapiens
US-09-109-100-1
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US-09-109-100-1
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61 ASNIQDEELCGGIMRLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCL 120
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GENERAL INFORMATION:
APPLICANT: Lyman, Stewart D.
APPLICANT: Lyman, M. Patricia
APLICANT: Beckmann, M. Patricia
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Stephen L. Malaska, Immunex Corporation
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 1242; DB 4;
100.0%; Pred. No. 3.9e-117;
w.smarrhes 0;
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macincosh
COMPUTER: Apple Macincosh
COMPUTER: Apple Macincosh
SOFTWARE: Macrosoft Word, Version #5.1
CURRENT APPLICATION DATA:
PILING DATE: 24-UNN-1996
CLASSIFICATION NUMBER: US/08/669,692
FILING DATE: December 3, 1993
APPLICATION NUMBER: US/08/162,407
FILING DATE: December 3, 1993
APPLICATION NUMBER: 08/111,758
FILING DATE: ANGUSE 25, 1993
APPLICATION NUMBER: 08/111,758
FILING DATE: ANGUSE 25, 1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/106,463
FILING DATE: MAY 24, 1993
APPLICATION NUMBER: 08/06,394
FILING DATE: MAY 24, 1993
APPLICATION NUMBER: 08/06,394
FILING DATE: MAY 24, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
REPERENCE/DOCKET NUMBER: 2813-C
TELECHONE: (206) 587-0430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     : 235 amino acids
amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: 756822
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity 100.
Matches 235; Conservative
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                                                                                                                                                                                                               CITY: Seattle
STATE: Washington
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
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TELEX: 756822
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 235 amino acid
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PCT-US94-05365-6
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100.0%; Score 1242; DB 4; Length 235;
Best Local Similarity 100.0%; Pred. No. 3:9e-117;
Matches 235; Conservative 0; Mismatches 0; Indels 0
                GENERAL INFORMATION:
APPLICANT: Lyman, Stewart D.
APPLICANT: Beckmann, M. Patricia
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Stephen L. Malaska, Immunex Corporation
STREET: 51 University Street
CITY: Seattle
STATE: Washington
COUNTRY: US
                                                                                                                                                                                                                                                                                           COMPUTER: US

ZIP: 98101

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 7.0.1

SOFTWARE: Microsoft Word, Version #5.1

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US 08/162,407
FILING DATE: 19-MAY-1995
CLASSIFICATION NUMBER: US 08/162,407
FILING DATE: August 25, 1993
APPLICATION NUMBER: 08/11,758
FILING DATE: August 25, 1993
APPLICATION NUMBER: 08/106,463
FILING DATE: August 25, 1993
APPLICATION NUMBER: 08/106,463
FILING DATE: August 12, 1993
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/106,43
FILING DATE: May 24, 1993
CLASSIFICATION NUMBER: 2813-C
TLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: MAISARA, SCEPHOL L.
REGISTRATION NUMBER: 23, 655
REFERENCE/DOCKET NUMBER: 2813-C
TELECOMMUNICATION INFORMATION:
TELEPRIONE: (206) 233-0644
TELEX: 756822
INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
LENGTH: 235 amino acids
TYPE: amino acid
TOPOLOGY: linear
TOPEL OFFICE TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; MOLECULE TYPE: protein US-08-444-626-6
Patent No. 6632424
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RESULT

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Sequence 6, Application PC/TUS9405365

Sequence 6, Application PC/TUS9405365

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                                   121 REVOTNISRLLOETSEQLVALKEWITRONFSRCLELOCOPDSSTLPPPWSPRPLEATAPT 180
                                                                              121 RFVQTNISRLLQETSEQLVALKPWITRQNFSRCLELQCQPDSSTLPPPWSPRPLEATAPT 180
61 ASNLQDEELCGGLWRLVLAQRWMERLKTVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCL 120
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                                                                                                                        181 APOPPLILLLIPVGLLLLAAAMCLHWORTRRRTPRPGEQVPPVPSPQDLLLVEH 235
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                                                                                                                                                                                                                                                              Sequence 10, Application US/09109100C
Patent No. 6291601
GENERAL INFORMATION:
APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
CURRENT FAPLICATION NUMBER: US/09/100C
CURRENT FILION DATE: 1998-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 10
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Sequence 18, Application US/09109100C
Bequence 18, Application US/09109100C
Batent No. 6291661
CENERAL INFORMATION:
APPLICANT: Graddis, Thomas J.
APPLICANT: McGrew, Jeffrey T.
TITLE OF INVENTION: FILE AFFRENCE: 03260.0028
CURRENT FILING DATE: 1998-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 18
LENGTH: 209
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Matches 211; Conservative
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ORGANISM: Homo sapiens
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ORGANISM: Homo sapiens
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US-09-109-100-10
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                                    1 TQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERL 60
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TQDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERL 86
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US-09-109-101-12
Sequence 12, Application US/09109100C
Sequence 12, Application US/09109100C
Sequence 12, Application US/09109100C
Sequence 12, Application US/09109100C
TITLE OF UNIVERNATION, Thomas J.
APPLICANT: Graddis, Jeffrey T.
TILE OF INVENTION, FLT3-1 MUTANTS AND METHODS OF USE
FILE REFRENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/109,100C
NUMBER OF SEQ 1D NOS: 20
SOFTWARE: Patentin Ver. 2.1
SEQ 1D NO 12
LENGTH: 209
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APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
APPLICANT: MGGRew, Jeffrey T.
TITLE OF INVENTION: FLTJ-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/109,100C
CURRENT FILING DATE: 1998-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PatentIn Ver. 2.1
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208; Conservative
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ORGANISM: Homo sapiens
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LENGTH: 209
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Matches 20
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RESULT 14
US-09-109-110-11
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                                                                  Length 209;
                                                                                                 Indels
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Patent No. 6291661

GENERAL INFORMATION:
APPLICANT: Graddis Thomas J.
APPLICANT: Mcarddis Thomas J.
TILLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
TILLE REFERENCE: 03260.0026
CURRENT APPLICATION NUMBER: US/09/109,100C

NUMBER OF SEQ ID NOS: 20
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 14
LENGTH: 209
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Patent No. 6291661
GENERAL INFORMATION:
APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
APPLICANT: McGrew, Jeffrey T.
TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
                                                              Score 1110; DB 3;
Pred. No. 6.5e-104;
0; Mismatches 1;
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                                                                   89.4%;
99.5%;
                                                                  Query Match
Best Local Similarity 99.5%
Matches 208; Conservative
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, ORGANISM: Homo sapiens
US-09-109-100-14
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-109-100-12
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US_09-109-100-17
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US-09-109-100-14
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Pred. No. 1e-103;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                              Length 209;
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APPLICANT: Graddis, Thomas J.
APPLICANT: McGrew, Jeffrey T.
TITLE OF INVENTION: FLIZ3-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/109,100C
CURRENT FILING DATE: 1998-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                 Score 1110; DB 3;
Pred. No. 6.5e-104;
1; Mismatches 0;
; FILE REFERENCE: 03260.0028
; CURRENT APPLICATION NUMBER: US/09/109,100C;
; CURRENT FILING DATE: 1998-07-02
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: PatentIN Ver. 2.1
; SEQ ID NO 17
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-109-100-17
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GENERAL INFORMATION:
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ilarity 99.5%;
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Matches 208; Conservative
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Matches 208; Conserv
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RESULT

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87 KTVAGSKWQGLLERVNTEIHFVTKCAFQPPPSCLRFVQTNISRLLQETSEQLVALKFWIT 146
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Best Local Similarity 99.5%; Pred. No. 1e-103;
Matches 208; Conservative 0; Mismatches 1; Indels
        Sequence 15, Application US/09109100C

Sequence 15, Application US/09109100C

Sequence 15, Application US/09109100C

GENERAL INPORMATION:
APPLICANT: Graddis, Thomas J.
APPLICANT: McGrew, Jeffrey T.
TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
CURRENT FILING DATE: 1998-07-02

NUMBER OF SEQ ID NOS: 20

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 15

LENGTH: 209
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CORGANISM: Homo sapiens
US-09-109-100-15
US-09-109-100-15
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Search completed: April 8, 2004, 17:09:11 Job time : 22.0734 secs

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A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Nolecule type: mRNA
A;Residues: 1-235 <RES>
A;Residues: 1-235 <RES>
A;Cross-references: BMBL:U03858; NID:g494978; PIDN:AAA19825.1; PID:g494979
R;Lyman, S.D.; Stocking, K.; Davison, B.; Fletcher, F.; Johnson, L.; Escobar, Oncogene 11, 1165-1172, 1995
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                                                         April 8, 2004, 17:03:02 ; Search time 10.1196 Seconds (without alignments) 1264.231 Million cell updates/sec
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                         283366 seqs, 96191526 residues
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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filt3 ligand - human (man) (c) Species: Homo sapiens (man) (c) Acate: 29-May-1998 #text_change 01-Dec-2000 (c) Acate: 29-May-1998 #sequence_revision 29-May-1998 #sequence_revision 29-May-1998 #sequence_revision 138440; 139075, 843292 R;Lyman, S.D.; James, L.; Johnson, L.; Brasel, K.; de Vries, P.; Escobar, S.S.; Downey, R;Lyman, S.D.; James, L.; Johnson, L.; Brasel, K.; de Vries, P.; Escobar, S.S.; Downey, A;Title: Cloning of the human homologue of the murine flt3 ligand: a growth factor for e. A;Reference number: 138440; MUID:94235842; PMID:8180375
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R;Lyman, S.D.; Stocking, K.; Davison, B.; Fletcher, F.; Johnson, L.; Escobar, Oncogene 11, 1165-1172, 1995
Oncogene 11, 1165-1172, 1995
A;Reference number: 139075; MUID:96032581; PMID:7566977
A;Accession: 139076
A;Accession: 139076
A;Accusion: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-178 <RES>
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A;Introns: 11/3; 48/3; 66/3; 114/3; 161/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Species: Homo sapiens (man)
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jul-2000
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100.0%; Score 701; DB 2;
Best Local Similarity 100.0%; Pred. No. 9.8e-66;
Matches 133; Conservative 0; Mismatches 0;
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Gaps

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C)Accession: 158343 "... Bscobar, S.; Downey, H.; de Vries, P.; Brasel, K.; Stocking, I C)Accession: 189-157, 1995
A)Accession: 158343; MUID:95124710; PMID:7824267
A)Accession: 158343
                                              C;Species: Mus musculus have mouse)
C;Species: Mus musculus (house mouse)
C;Accession: 84291
C;Accession: 84291
C;Accession: 64294
Bequence_revision 10-Nov-1995 #text_change 17-Mar-1999
C;Accession: 84291
R;Hannum, C; Cullpepper, J; Campbell, D; McClanahan, T; Zurawski, S; Bazan, J.F.; Ki felt, A; Muench, M; Kelner, G; Namikawa, R; Rennick, D; Roncarolo, M.G.; Zlotnik, J Nature 368, 643-648, 1994
A;Title: Ligand for FLT3/FLKZ receptor tyrosine kinase regulates growth of haematopoiet: A;Reference number: 843291
A;Accession: 843291
A;Accession: 843291
A;Accession: Specialminary
A;Molecule type: mRNA
A;Residues: 1-220 cHAN>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lt3 ligand isoform 5H - mouse
;Species: Mus sp. (mouse)
;Date: 26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change 05-Nov-1999
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Local Similarity 73.9%; Pred. No. 1.8e-45;
tes 99; Conservative 12; Mismatches 21; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              72.5%; Score 508; DB 2; Length 22 llarity 73.9%; Pred. No. 1.8e-45; Conservative 12; Mismatches 21; Indels
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A;Residues: 1-220 <RES>
   S43291
FLT3/FLK2 ligand (clone T118) - mouse
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F173/21

F1
                                                                                         A.Accestue: prediminary; translated from GB/EMBL/DDBJ
A.Molecule type: DNA
A.Molecule type: MUD:94195428; PMD:81072037
A.Title: Ligand for FLT3/FLKZ receptor tyrosine kinase regulates growth of haematopoieti
A.Molecule type: MUD:94195428; PMD:8145851
A.Accession: S43292
A.Accession: S43292
A.Accession: S43292
A.Accession: GB:104806; NID:94195428; PIDN:AAA17999.1; PID:g483845
A.Accession: GB:104806; NID:g483844; PIDN:AAA17999.1; PID:g483845
A.Molec: the authors translated the codon AGT for residue 25 as Met
C.Genetics:
A.Introns: 11/3; 48/3; 66/3; 114/3; 161/1; 220/3
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A,Title: Structural analysis of human and murine flt3 ligand genomic loci
A,Reference number: 139075, MUID:96032581, PMID:7566977
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132; Conservative
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flt3/flk-2 ligand precursor - mouse
C;Species: Mus musculus (house mouse)
C;Date: 13.-Jan-1995 #sequence_revision 13.-Jan-1995 #text_change 08-Oct-1999
C;Accession: A49265; I49347; I49346; S43290
R;Lyman, S.D.; James, L.; Vanden Bos, T.; de Vries, P.; Brasel, K.; Gliniak, B.; Holling
D.; Williams, D.E.; Beckmann, M.P.
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RESULT

ij

2; Gaps

Length 220;

6

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(without alignments)
958.091 Million cell updates/sec
                                                                                                                                       April 8, 2004, 16:59:26 ; Search time 7.22826 Seconds
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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701 1 QDCSFQHSPISSDFAVKIRE......LKPWITRQNFSRCLELQCQP 133 US-08-994-468-6\_COPY\_28\_160 Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext Scoring table:

0.5

Total number of hits satisfying chosen parameters: 141681 segs, 52070155 residues Searched:

seq length: 0 seq length: 200000000 Minimum DB Maximum DB Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt\_42:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

SCHWARKIRS		HUMAN P49771 home	10USE P49772	Q55854 syne	ILPJ Q92k61	092gv0	STAAM Q932g1	STAAN Q99wb0	P24575 burk	Q9cux1	CEFD_STRCL P18549 streptomy		VIBCH Q9kqh4	P09264 va	9i (D8d)	P36312 cc			P56000	pomod	Snm Ozme6Ö	001755	Q8a0h8	P31864	VIBPA Q87r73 vibr	Q9tsw0	P15591 pseu	MOUSE Q60929	HUMAN P04000 ho	SPMU Q01259 bact	YEAST P53086 sac	RALSO Q8y035 ra	T.1000	ECC173
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P49086 zea mays (m Q14241 homo sapien	P44241 haemophilus P34344 caenorhabdi	Q8zd85 yersinia pe P59157 s dimethyla	Q9ve01 drosophila	P54649 actinobacil	P/1533 mycobacceri Q14679 homo sapien	Q00416 saccharomyc	Q14517 homo sapien
CRTI_MAIZE ELA1_HUMAN	VG48_HAEIN YK65_CAEEL	UNG YERPE KSGA SYNEL	CCA5_DROME	HTPG_ACTAC	SECA_MYCSM Y173_HUMAN	SEN1_YEAST	FATH_HUMAN
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3.4 5.5	36	8 6	40	4.	4 4 2 6	44	45

## ALIGNMENTS

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MEDILINE-20343011; PubMed-1081197;
A Savvides S.N., Boone T., Karplus P.A.;
This ligand structure and unexpected commonalities of helical
a savvides structure and unexpected commonalities of helical
bundles and cystine knots.;
In at. Struct. Biol. 7:486-491(2000).
In at. Struct. Biol. 7:486-491(2000).
In at. Struct. Biol. 7:486-491(2000).
In at. Struct. Stimulates the proliferation of early hematopoietic
cells. Synergizes well with a number of other colony stimulating
factors and interleukins.
I Submiller Robors (1soform 2).
I Submiller Robors (1soform 2).
I Secreted (1soform 2).
I Secreted (1soform 2).
I Secreted (1soform 2).
I Secreted (1soform 2).
I Submiller Robors (1soform 2).
I Submiller Robors (1soform 2).
I ALTERNATIVE PRODUCTS:
I Submiller Synonyms=Membrane-bound;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=94235842; PubMed=8180375; Lyman S.D., James L., Johnson L., Brasel K., de Vries P., Lyman S.D., James L., Johnson L., Brasel K., de Vries P., Colobar S.S., Downey H., Splett R.R., Beckmann M.P., McKenna H.J.; "Cloning of the human homologue of the murine flt3 ligand: a growth factor for early hematopoietic progenitor cells."; Blood 83:2795-2801(1994).
                                                                                                                                                                                                                                                                                                     MEDLINE-94195428; PubMed-8145851; McClanahan T., Zurawski S., Hannum C., Culpepper J., Campbell D., McClanahan T., Zurawski S., Bazan J.F., Kastelein R., Hudak S., Wagner J., Mattson J., Luh J., Duda G., Mattina M., Peterson D., Menon S., Shanafelt A., Muench M., Kelner G., Namikawa R., Rennick D., Roncarolo M.G., Zlotnik A., Rosnet O., Dubreuil P., Birnbaum D., Lee F., "Ligand for FUT3/FUZz receptor tyrosine kinase regulates growth of haematopoietic stem cells and is encoded by variant RNAS.";
                                                            01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
15-MAR-2004 (Rel. 43, Last annotation update)
15 Cytokine precursor (Fms-related tyrosine kinase 3 ligand) (Flt3 FLT3LG)
                                                                                                                                                                                 Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A., AND ALTERNATIVE SPLICING.
MEDLINE-$6032881; PubMed=7566977;
Lyman S.D., Stocking K., Davison B., Fletcher F., Johnson L.,
ESCODAT S.;
                                        235 AA
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                                        PRT;
                                          STANDARD;
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                                      FL3L HUMAN
P49771;
RESULT 1
FL3L_HUMAN
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TVAGSKNQGLLERVNTRIHFVTKCAFQPPPSCLRFVQTNISRLLQETSEQLVALKPWITR 120
                                                                            QDCSPQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERLK 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lyman S.D., James L., Vanden Bos T., Devries P., Brasel K., Gliniak B., Hollingsworth L.T., Picha K.S., McKenna H.J., Splett R.R., Fletcher F.A., Maraskovsky E., Farrah T., Foxworthe D., Williams D.E., Beckmann M.P.; "Molecular cloning of a ligand for the flt3/flk-2 tyrosine kinase receptor: a proliferative factor for primitive hematopoietic cells."; Cell 75:1157-1167(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       McClanahan T., Culpepper J., Campbell D., Wagner J.,
Franz-Bacon K., Mattson J., Tsai S., Luh J., Guimares M.J.,
Mattei M.-G., Rosnet O., Birnbaum D., Hannum C.;
Submitted (Apr.1966) to the EMBL/GenBank/DDB databases.
-!- PUNCTION: Stimulates the proliferation of early hematopoietic
cells. Synergizes well with a number of other colony stimulating
factors and interleukins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Identification of soluble and membrane-bound isoforms of the murine flt3 ligand generated by alternative splicing of mRNAs."; Oncogene 10:149-157(1995).
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                                                                                                                                                                                                                                                                                                                           SL cytokine precursor (Fms-related tyrosine kinase 3 ligand) (Flt3) ligand) (Flt3L).
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Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=94195428; PubMed=8145851; MEDLINE=94195428; PubMed=8145851; Maclanahan T., Zurawski S. Hannum C., Culpepper J., Campbell D., McClanahan T., Zurawski S. Bazan J.F., Kastelein R., Hudak S., Wagner J., Mattson J., Luh J Duda G., Martina N., Peterson D., Menon S., Shanafelt A., Luh Wuench M., Kelner G., Namikawa R., Rennick D., Roncarolo M.G., Zlotnik A., Rosnet O., Dubreuil P., Birnbaum D., Lee F.; "Ligand for FITJ/FLK2 receptor tyrosine kinase regulates growth haematopoletic stem cells and is encoded by variant RNAs.";
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Lyman S.D., Stocking K., Davison B., Fletcher F., Johnson L.,
Escobar S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A., AND ALTERNATIVE SPLICING.
MEDLINE-95124710; PubMed=7824267;
Lyman S.D., James L., Escobar S., Downey H., de Vries P.,
Brasel K., Stocking K., Beckmann M.P., Copeland N.G.,
                                                                                                                                                                                                                                                 FL3L MOUSE STANDARD; FRT; 232 AA. P49772; Q64085; 01-0CT-1996 (Rel. 34, Created) 10-CT-1996 (Rel. 34, Last sequence update) 10-0CT-2003 (Rel. 42, Last annotation update)
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                                                                                                                                                                                                                                               232 AA.
                                                                                                                                                                                                                                               PRT;
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MEDLINE=94084791; PubMed=7505204;
                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata,
Mammalia, Butheria, Rodentia,
                                                                                                                          ONFSECLELOCOP 133
                                                                                                                                                          ONFSRCLELOCOP 160
                                                                                                                                                                                                                                               STANDARD;
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                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lab-sib.ch).
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N-LINKED (GLCNAC, , ) (POTENTIAL).
DSSTLPPPWSPRPLEATA -> VETVFHRVSQDGLDLITS
                                                                                                                                                                                                                                                                                                                                                GO; GO:0005625; C:soluble fraction; TAS.
GO; GO:0005625; C:soluble fraction; TAS.
GO; GO:0008284; P:posttive regulation of cell proliferation; TAS.
GO; GO:0007165; P:signal transduction; TAS.
InterPro; IPRO04213; Flt3 lig.
Fram; PFRO34213; Flt3 lig.
Fram; PFRO34213; Flt3 lig.
Cytokine; Glycoprotein; Transmembrane; Alternative splicing; Signal;
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EXTRACELLULAR (POTENTIAL).
POTENTIAL.
CYTOPLASMIC (POTENTIAL).
                me=2; Synonyms=Soluble;
Isold=P49771-2; Sequence=VSP_004251, VSP_004252;
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/FTId=VSP 004251.
Missing (In isoform 2).
/FTId=VSP 004252.
G -> A (IN REF. 1).
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Pred. No. 8.1e-66;
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     IsoId=P49771-1; Sequence=Displayed;
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100.0%; Pre
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EMBL; U29874; AAA9049.1; -.
EMBL; U129874; AAA90950.1; -.
PIR; I38440; I38440.
PIR; I39076; I39076.
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235 AA;
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1 QDCSFQHSPISSDFAVKIRE......LKPWITRQNFSRCLELQCQP 133
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                                                GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Gapop 10.0 , Gapext 0.5
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1: sp_archea:*

2: sp_bacteria:*

4: sp_human:*

5: sp_nwan:*

6: sp_mmal:*

7: sp_ncanelle:*

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10: sp_plant:*

10: sp_rotanelle:*

11: sp_rotane:*

12: sp_rotane:*

13: sp_vertebrate:*
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Maximum Match 100%
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Perfect score:
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Q8DP35 Q7VE54 Q9F5P9

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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	Description	Q865z3 papio cynoc	Q9mzu9 felis silve	Q9mzv0 canis famil	Q9gkeO bos taurus	Q8wnwl bos taurus	Q61104 mus musculu	Q8vch4 mus musculu	Q9gkd9 bos taurus	Q7z6n5 homo sapien	Q803il brachydanio	Q84kc6 hordeum vul	Q7wem8 bordetella	Q7w3a9 bordetella	Q7vu45 bordetella	Q8kr32 yersinia ps	Q9p2d0 homo sapien
SUMMARIES	ID	Q865Z3	60ZM6Ö	O9MZV0	Q9GKE0	Q8WNW1	Q61104	Q8VCH4	Q9GKD9	Q7Z6N5	Q803I1		Q7WEM8	Q7W3A9	Q7VU45	Q8KR32	Q9P2D0
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InterPro, IPR004213; Flt3 lig.
Pfam; PF02947; flt3 lig; I.
SEQUENCE 294 AA; 32394 MW; 6859917A3B74ABCD CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=2035971; PubMed=10902925;

MEDLINE=2035971; PubMed=10902925;

Tanglecular cloning of canine and feline flt3 ligand reveals high degree of similarity to the human and mouse homologue but uniquely long cytoplasmic domain.";

DNA Seq. 11:163-166(2000).

REMBL; AF155149; AAF97089.1; -

RSSP; P49771; IETE.

GO; GO:0016020; C:membrane; IEA.

RO; GO:0015025; F:cytokine activity; IEA.

RITERPRO; IPRO4213; Flt3 lig; I.

InterPro; IPRO4213; Flt3 lig; I.

REMBL; AF85047; flt3 lig; I.

REMBL; AF85047; flt3 lig; I.
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Molecular cloning of canine and feline flt3 ligand reveals high
Molecular cloning of canine and feline flt3 ligand reveals high
degree of similarity to the human and mouse homologue but uniquely
long cytoplasmic domain.";

EMBL; AF155148; AAF87088.1; -.

HSSP; P49771; 1ETE.

GO; GO:0016020; C:membrane; IEA.

GO; GO:0005125; F:cytokine activity; IEA.
                                                                                                                                                                                                                                                                              01-JUN-2003 (ILEMBLE)
Flt3 ligand.
Flt3 ligand.
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Bukaryota; Metazoa; Chordata; Cranivora; Fissipedia; Felidae; Felis.
Mammalia; Butheria; Carnivora; Fissipedia; Felidae; Felis.
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Canis familiaris (Dog).
Eukaryotza, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Carnivora, Fissipedia, Canidae, Canis.
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                                                                                                                                                                                                                    01-077-2000 (TrEMBLrel. 15, Created)
01-077-2000 (TrEMBLrel. 15, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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01-077-2000 (TrEMBLrel. 15, Last sequence update)
01-07N-2003 (TrEMBLrel. 24, Last annotation update)
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MEDLINE=20358731; PubMed=10902925;
148 QNFSGCLELQCQP 160
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                                                                                                                                                                                                                                                                                                                89 VAGSQMQILLEAVNTEIHFVTFCAFQPLPSCLRFVQTNISHLLQDTSQQLAALKPWITRR 148
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                                                                                                                                                                                                                                                                            62 VAGSKWQGLLERVNTEIHFVTKCAFQPPSCLRFVQTNISRLLQBTSEQLVALKFWITRQ 121
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MEDIJINE=20570936; PubMed=11120823;
MEDIJINE=20570936; PubMed=11120823;
Mangi W., Brown W.C., Palmer G.H.;
"Identification of fetal liver tyrosine kinase 3 (Flt3) ligand domain required for receptor binding and function using naturally occurring ligand isoforms.",
J. Immunol. 165:6966-6974(2000).
EMBL; AF282985; AAF99322.1; -.
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                                                                                                                                           2 DCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERLKT
                                                                                                                                                                                                        29 DCSFSHSPISSTFAVTIRKLSDYLLQDYPVTVASNLQDDELCGAFWRLVLAQRWWVRLQA
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Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
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       Length 294;
Query Match 82.9%; Score 581; DB 6; Length 29
Best Local Similarity 84.1%; Pred. No. 2.6e-57;
Matches 111; Conservative 7; Mismatches 14; Indels
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GO; GO:0016020; C:membrane; IEA.

GO; GO:0005125; F:cytckine activity; IEA.

InterPro; IPRO4213; F:a3 lig.

Pfam; PF02947; filt3 lig; 1.

SEQUENCE 292 AA; 32390 NW; D68B9ED79221202D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-WAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Flt3 ligand isoform-1.
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0BWNW1.
01-MAR-2002 (TYEMBLrel. 20, Created)
01-MAR-2002 (TYEMBLrel. 20, Last sequence update)
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Mature wi Human fit Human fit Human fit Full leng Human Fit Human Fit C neoform Secreted Human Fit Human f

Human filt Firt-3 and Chimeric Chimeric Human filt Chimeric Chimeric Chimeric Firt-3 and Human filt Human filt G-CSP-FIL G-CSP-FIL Human filt Human filt

G-CSF/IgG Flt3L 1-1

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Aab20193 Human Flt
Aaw69007 Human flt
Aay69720 Mature will
Aay69721 Human flt
Aaw67549 Human flt
Aay69719 Full leng
Aab20192 Human Flt
Ad201929 Human Flt
Ad301929 Human Flt
Ad42874 Human Flt
Ad480915 Amino acin
Ad48117 Human Flt
Ad480915 Amino acin
Ad48117 Human Flt
Ad480915 Amino acin
Ad48117 Human flt
Aaw8329 Human flt
Aaw8328 Human flt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Haematopoletic receptor agonist; flt3 receptor agonist; flt3 ligand; human; chimeric protein; stem cell expansion; tumour; infection; autoimmune disease; haematopoietic disorder; therapy; dendritic cell; pMON32329.pep.
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                             AAR67541
AAY67769
AAY69719
AAB20192
ABB31626
AAO19091
AAG79949
ADD22874
ADD22874
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AAW77952
AAW83294
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ADE80752
AAW83302
AAW83298
AAW77951
AAW77939
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AAW77910;
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Aaw79036 Human E
Aaw7901 Human E
Aaw77911 Human E
Aaw77913 Human E
Aaw69035 Human E
Aaw69037 Human E
Aaw69037 Human E
Aaw77926 Flt3 li
Aaw77926 Flt3 li
Aaw69049 Human E
Aaw69049 Human E
Aaw77925 Flt3 li
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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701
1 QDCSFQHSPISSDFAVKIRE......LKFWITRQNFSRCLELQCQP 133
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Aaw77930
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     GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                     of hits satisfying chosen parameters:
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Maximum Match 100%
Listing first 250 summaries
                                    - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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11: geneseqp1980s:*
2: geneseqp1990s:*
4: geneseqp2000s:*
5: geneseqp2001s:*
6: geneseqp2003as:*
7: geneseqp2003as:*
8: geneseqp2003as:*
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63 TVAGSKMOGLIERVNTEIHFVTKCAFOPPSCLRFVOTNISKLLOETSEOLVALKPWITR 122
                                                                                                                                                                                                                                                                                                                                      Protein pMON32341.pep is a human flt3 ligand encoded by plasmid pMON32341 (see AAV5505), and is suitable for expression in Escherichia coll: The invention relates to multi-functional chimeric haemstopoietic receptor agonists (see e.g. AAW7780-822) that may include flt3 receptor agonists comprising sequence-rearranged flt3 ligand (see AAV77782). These novel chimeric agonists can be used to stimulate the production of haematopoietic cells in a patient, for the ex vivo expansion of haematopoietic cells, for the production of dendritic cells and to treat haematopoietic disorders, tumours, infection or autoimmune diseases
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                                                                                                                                                     Multi-functional chimeric haematopoietic receptor agonist - useful
treat haematopoietic disorders, tumours, infections or autoimmune
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Woulfe SL;
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   Minster NI,
                                                                                                                                                                                                                                                                                 Example 100; Page 206; 841pp; English
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Minnerly JC;
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   Minnerly JC,
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Best Local Similarity 100.
Matches 133; Conservative
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dendritic cell production
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Woulfe SL, Minster NI,
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N-PSDB; AAV69034.
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   Streeter PR,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Protein pMON32329.pep is a human flt3 ligand encoded by plasmid pMON32329 (see AAV55203), and is suitable for expression in Escherichia coll: The invention relates to multi-functional chimeric haematopoietic receptor agonists (see e.g. AAW77180-822) that may include flt3 receptor agonists comprising sequence rearranged flt3 ligand (see AAV77782). These novel chimeric agonists can be used to stimulate the production of haematopoietic cells in a patient, for the ex vivo expansion of haematopoietic cells, for the production of dendritic cells and to treat haematopoietic disorders, tumours, infection or autoimmune diseases
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autoimmune disease; haematopoietic disorder; therapy; dendritic cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Haematopoietic receptor agonist, flt3 receptor agonist, flt3 ligand;
                                                                                                                                                                                                                                                                                                           Multi-functional chimeric haematopoietic receptor agonist - useful treat haematopoietic disorders, tumours, infections or autoimmune
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                                                                                                                              Mckearn JP, Summers NL, Si
JC, Minster NI, Woulfe SL;
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Best Local Similarity 100.0%; Pred. No. 2.4e-76;
Matches 133; Conservative 0; Mismatches 0;
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N-PSDB; AAV55203.
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Sequence 12, Appl
Sequence 14, Appl
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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US-09-904-536-18
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US-08-994-468-6
US-09-913-806-6
US-09-904-538-1
US-10-059-449-6
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125 ONFSRCLELQCQP 137
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US-09-448-378-1
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                                                            Sequence 18, Application US/09904536
Fatent No. US2002011475A1
GENERAL INPORMATION:
APPLICANT: GRACIEW, Jeffrey T.
TITLE OF INVENTION: PLT3-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/904,536
CURRENT FILING DATE: 2001-07-16
PRIOR FILING DATE: 1999-07-02
NUMBER OF SEQ ID NOS: 20
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 18
LENTH: 209
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Sequence 10, Application US/09904536
GENERAL INFORMATION:
APPLICANT: McGrew, Jeffrey T.
TITLE OF INVENTION: FILT3-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 02260.0028
CURRENT APPLICATION NUMBER: US/09/904,536
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: PRIOR APPLICATION NUMBE
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Best Local Similarity 100.0%; Pred. No. 2.9e-74;
Matches 133; Conservative 0; Mismatches 0;
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Best Local Similarity 100.0%; Pred. No. 2.9e-74;
Matches 133; Conservative 0; Mismatches 0;
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SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 10
LENGTH: 212
TYPE: PRT
TYPE: PRT
COSANISM: Homo sapiens
US-09-904-536-10
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; ORGANISM: Homo sapiens
US-09-904-536-18
RESULT 2
US-09-904-536-18
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61 TVAGSKMOGLLERVNTEIHFVTKCAFOPPSCLRFVOTNISRLLOETSEOLVALKPWITR 120
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Sequence 6, Application US/08994468
| Publication No. US20030148516A1
| GENERAL INFORMATION:
| APPLICANT: Lyman, Stewart D. |
| TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors NUMBER OF SEQUENCES: 8
| CORRESPONDENCE ADDRESS: ADDRESS: ADDRESSE: Stephen L. Malaska, Immunex Corporation STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 235;
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                                                                                                                                                                                                                                                                                                                                                  COMPUTER: READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macincosh
COMPATURE: SEADABLE Macincosh
COMPATURE: SYSTEM: Macintosh 7.0.1
SOFTWARE: Microsoft Word, Version #5.1
CURRENT APPLICATION DMTA:
RAPLICATION NUMBER: US/08/994,468
FILING DATE: 19-Dec-1997
CLASSIFICATION ATMS:
APPLICATION ATMS: 08/162,407
FILING DATE: AUGUSER: 08/162,407
FILING DATE: AUGUSER: 08/162,407
FILING DATE: AUGUSER: 08/162,407
FILING DATE: AUGUSER: 08/164,43
APPLICATION NUMBER: 08/164,43
APPLICATION NUMBER: 08/164,43
APPLICATION NUMBER: 08/06,463
FILING DATE: AUGUSE 25, 1993
APPLICATION NUMBER: 08/06,934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 701; DB 8;
100.0%; Pred. No. 3.3e-74;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: 2813-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEFAX: (206) 233-0644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear

MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
US-08-994-468-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 235 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS
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INFORMATION FOR SEQ ID NO: 6:
                                                                                                                                                                                                                                                                             CITY: Seattle
STATE: Washington
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Matches 133; Conservative
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9 87

Gaps

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88 TVAGSKMOGLLERVNTEIHFVTKCAFOPPPSCLRFVOTNISRLLOETSEOLVALKPWITR 147
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APPLICANT: Graddis, Thomas J.
TITLE OF INVENTION: FLT3-L MCTANTS AND METHODS OF USE; TITLE OF INVENTION: FLT3-L MCTANTS AND METHODS OF USE; FILE REFERENCE: 03260.0028; CURRENT APPLICATION NUMBER: US/09/904,536; CURRENT FILING DATE: 2001-07-16; PRIOR PLLING DATE: 1999-07-02; NUMBER OF SEQ ID NOS: 20; SOFTWARE: Patentin Ver: 2.1; SEQ ID NO : 20.
                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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Best Local Similarity 100.0%; Pred. No. 3.3e-74;
Matches 133; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
100.0%; Score 701; DB 9;
Best Local Similarity 100.0%; Pred. No. 3.3e-74;
Matches 133; Conservative 0; Mismatches 0;
                                                                   TELEX: 756822

INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:

LENGTH: 235 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 6: US-09-983-806-6
              TELECOMMUNICATION INFORMATION
TELEPHONE: (206) 587-043(
TELEFAX: (206) 233-0644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/10643384 Publication No. US20040037845A1 GENERAL INFORMATION:
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TYPE: PRT
CRGANISM: Homo sapiens
US-09-904-536-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 TVAGSKMQCLLERVNTEIHFVTKCAFQPPSCLRFVQTNISRLLQETSEQLVALKPWITR 120
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US-09-983-806-6
Sequence 6, Application US/09983806
Sequence 6, Application US/09983806
GENERAL INFORMATION:
APPLICANT: Lyman, Stewart D.
Beckmann, M. Patricia
TITLE OF INVENTIONS: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESSE:
ADDRESSEE: 51 University Street
STREET: 51 University Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
; Sequence 1, Application US/09448378
; Patent No. US20020034517A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: Dendritic Cell Stimulatory Factor
; FILE REPRENCE: 2836-D
; CURRENT APPLICATION NUMBER: US/09/448,378
; CURRENT FILING DATE: 1999-11-23
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 1
; LENGTH: 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
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COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh
OPERATING SYSTEM: Macintosh 7.0.1
SOFTWARE: Microsoft Word, Version #5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/983,806
FILING DATE: 25-Oct-2001
CLASSIFICATION TATA:
APPLICATION DATE: 19-WAY-1995
FILING DATE: 19-WAY-1995
FILING DATE: 103-DEC 1993
APPLICATION NUMBER: US 08/162,407
FILING DATE: MUMBER: 08/111,758
FILING DATE: AUGUST 08/110,433
FILING DATE: AUGUST 12, 1993
APPLICATION NUMBER: 08/110,433
FILING DATE: AUGUST 12, 1993
APPLICATION NUMBER: 08/110,433
FILING DATE: AUGUST 12, 1993
APPLICATION NUMBER: 08/106,463
FILING DATE: AUGUST 12, 1993
APPLICATION NUMBER: 08/106,463
FILING DATE: AUGUST 12, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 701; DB 9;
100.0%; Pred. No. 3.3e-74;
tive 0; Mismatches 0;
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ATTORNEY/AGENT INPORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 32,66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 98101
COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100.0
Matches 133; Conservative
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CRGANISM: Homo sapiens
US-09-448-378-1
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61 TVAGSKMQGLLERVNTEIHFVTKCAFQPPSCLRFVQTNISRLLQETSEQLVALKFWITR 120
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Sequence 2, Application US/10241927

Publication No. US20030113341A1

GENERAL INFORMATION:

APPLICANT: Lynch, David H.

APPLICANT: Maliszveki, Charles R.

APPLICANT: Maliszveki, Charles R.

APPLICANT: Maliszveki, Charles R.

TITLE OF INVENTION: THE USE OF FLT3-LIGAND IN THE TREATMENT OF CANCER FILE REFERENCE: 2836-F

CURRENT APPLICANTION NUMBER: US/10/241,927

CURRENT FILING DATE: 1996-09-11

PRIOR FILING DATE: 1996-09-17

PRIOR FILING DATE: 1996-09-17

PRIOR FILING DATE: 1996-10-03

PRIOR APPLICATION NUMBER: US 08/725,540

PRIOR APPLICATION NUMBER: US 08/539,142

PRIOR APPLICATION NUMBER: US 08/539,142

PRIOR FILING DATE: 1995-10-03

PRIOR FILING DATE: 1996-10-03

PRIOR PLING DATE: 1995-10-04

SEQUENCE: PARCENTION NUMBER: US 08/539,142

PRIOR FILING DATE: 1995-10-04

SEQUENCE: PARCENTION NUMBER: US 08/539,142

PRIOR FILING DATE: 1995-10-03

PRIOR FILING DATE: 1995-10-03

SEQUENCE: PARCENTION NUMBER: US 08/539,142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28 QDCSFQHSPISSDFAVKIRELSDYLLQDYFVTVASNLQDEELCGGGMRLVLAQRWMERLK 87
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Best Local Similarity 100.0%; Pred. No. 3.3e-74;
Matches 133; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 701; DB 13; Best Local Similarity 100.0%; Pred. No. 3.3e-74; Matches 133; Conservative 0; Mismatches 0;
FILING DATE: December 3, 1993
APPLICATION NUMBER: 08/111,758
FILING DATE: August 25, 1993
APPLICATION NUMBER: 08/106,463
FILING DATE: August 12, 1993
APPLICATION NUMBER: 08/068,394
FILING DATE: May 24, 1993
ATTORNEY/AGENT INFORMATION:
NAME: Malaska, Stephen L.
REGISTRATION NUMBER: 22,555
REGISTRATION NUMBER: 22,555
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEPHONE: (206) 587-0430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 6:
                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS: LENGTH: 235 amino acids
                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (206) 233-0644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 QNFSRCLELQCQP 133
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, ORGANISM: homo sapiens
US-10-241-927-2
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                                                        APPLICANT: Dynam, Dynam, Alewatt.
APPLICANT: Maraskovaky, Eugene
APPLICANT: Maraskovaky, Eugene
APPLICANT: Maraskovaky, Eugene
APPLICANT: Mrkenna, Hilary J.
APPLICANT: Mrkenna, Hilary J.
APPLICANT: Lynch, David H.
TITLE OF INVENTION: THE UBS OF FLT3-LIGAND IN THE TREATMENT OF INPECTION
FILE REFERENCE: 2836 H
CURRENT APPLICATION NUMBER: US/10/643,384
CURRENT FILING DATE: 2003-08-19
PRIOR APPLICATION NUMBER: 09/444,027
PRIOR PELING DATE: 1999-11-19
PRIOR PELING DATE: 1999-11-19
PRIOR PELING DATE: 1998-09-17
PRIOR APPLICATION NUMBER: 09/154,903
PRIOR APPLICATION NUMBER: 08/755,540
PRIOR PELING DATE: 1996-10-03
PRIOR PELING DATE: 1996-10-03
PRIOR PELING DATE: 1995-10-04
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin Version 3.2
SEQ ID NOS: 2
SEQ ID NOS: 2
SEQ ID NOS: 2
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; Sequence 6. Application US/10095449
; Publication No. US20020160004A1
; GENERAL INFORMATION:
Beckmann, M. Patricia
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Stephen L. Malaska, Immunex Corporation
STREET: 51 University Street
CITY: Seattle
STATE: Washington
COUNTY: US
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COMPUTER: Apple Macintosh
COMPUTER: System
COMPUTER: Apple Macintosh 7.0.1
SOFTWARE: Microsoft Word, Version #5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/095,449
FILING DATE: 13-Mar-2002
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%; Score 701; DB 12; Best Local Similarity 100.0%; Pred. No. 3.3e-74; Matches 133; Conservative 0; Mismatches 0;
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FILING DATE: 24-JUN-1996
APPLICATION NUMBER: US/08/162,407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 98101
COMPUTER READABLE FORM:
           Brasel, Kenneth A.
Lyman, Stewart D.
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ORGANISM: Homo sapien
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88 TVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCLRFVQTNISRLLQETSEQLVALKFWITR 147
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99.4%; Score 697; DB 9; Length 209;
Best Local Similarity 99.2%; Pred. No. 8.5e-74;
Matches 132; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 9, Application US/09904536; Sequence 9, Application US/09904536; Patent No. US20020111475A1; GENERAL INFORMATION: APPLICANT: Graddis, Thomas J. APPLICANT: McZew, Jeffrey T.; TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE; FILE REFERENCE: 03260.0028; CURRENT APPLICATION NUMBER: US/09/904,536; CURRENT FILING DATE: 2001-07-16; PRIOR APPLICATION NUMBER: PRIOR APPLICATION NUMBER: PRIOR APPLICATION NUMBER: 1999-07-02; NUMBER: PATENT NOS SOFTWARE: PATENT NOS
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Best Local Similarity 100.0%; Pred. No. 3.3e-74;
Matches 133; Conservative 0; Mismatches 0;
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Patent No. US20020111475A1
GENERAL INFORMATION:
APPLICANT: Graddia, Thomas J.
APPLICANT: McGrew, Jeffrey T.
TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF
FILE REFERENCE: 03260.0028
PRIOR FILING DATE: 2002-11-19
NUMBER OF SEQ ID NOS: 4
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
LENGTH: 235
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; ORGANISM: Homo sapiens
US-09-904-536-9
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; ORGANISM: Homo sapiens
US-10-401-364-1
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| Sequence 6, Application US/10314035
| Publication No. US20030157069A1
| GENERAL INFORMATION:
| APPLICANT: LYMAN, Stewart D. | APPLICANT: BECKNAIN, M. Patricia | APPLICANT: BECKNAIN, M. Patricia | TITLE OF INVENTION: METHODS OF USING FLT3-LIGAND IN HEMATOPOIETIC CELL TRANSPLANTATIC | FILE REFERENCE: 2813-P | CURRENT APPLICATION NUMBER: US 08/994,468 | PRIOR APPLICATION NUMBER: US 08/994,468 | PRIOR APPLICATION NUMBER: US 08/494,627 | PRIOR FILING DATE: 1997-12-19 | PRIOR FILING DATE: 1994-05-19 | PRIOR FILING DATE: 1994-05-19 | PRIOR FILING DATE: 1994-05-11 | PRIOR FILING DATE: 1994-03-07 | NUMBER OF SEQ ID NOS: 8 | SOFTWARE: Patentin version 3.1 | SEQ ID NOS: 8 | SOFTWARE: Patentin version 3.1 | SEQ ID NOS: 8 | SOFTWARE: Patentin version 3.1
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Publication No. US2004002760A1
GENERAL INFORMATION:
APPLICANT: McKenna, Hilary J.
APPLICANT: Liebowitz, David N.
APPLICANT: Maliazewski, Charles R.
TITLE OF INVENTION: METHODS OF USING FLT3-LIGAND IN IMMUNIZATION PROTOCOLS
FILE REPERBUCE: 3399-B
CURRENT APPLICATION NUMBER: US/10/401,364
CURRENT PILING DATE: 2003-03-26
PRIOR PILING DATE: 2002-03-26
PRIOR FILING DATE: 2002-03-26
PRIOR APPLICATION NUMBER: US 60/462/33
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                                                                                                            28 QDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERLK 87
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Best Local Similarity 100.0%; Pred. No. 3.3e-74;
Matches 133; Conservative 0; Mismatches 0; Indels 0
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US-10-314-035-6
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Pred. No. 8.5e-74;
1; Mismatches 0; Indels
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US-09-904-536-14

| Sequence 14, Application US/09904536
| Patent No. US20020111475A1
| GENERAL INFORMATION:
| APPLICANT: Graddis, Thomas J.
| APPLICANT: Graddis, Thomas J.
| TILLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE FILE REFERENCE: 03260.0028
| CURRENT FILING DATE: 2001-07-16
| PRIOR PILIATION NUMBER: US/09/904.536
| CURRENT FILING DATE: 1999-07-02
| NUMBER OF SEQ ID NOS: 20
| SOFTWARE: PatentIn Ver. 2.1
| IENGTH: 209
| TENGTH: 209
| TENGTH: 209
| TENGTH: 209
| TENGTH: 209
| US-09-904-536-14
CURRENT APPLICATION NUMBER: US/09/904,536
CURRENT FILING DATE: 2001-07-16
PRIOR APPLICATION NUMBER: PRIOR APPLICATION: 09/109,100
PRIOR FILING DATE: 1999-07-02
NUMBER OF SEQ ID NOS: 20
NUMBER OF SEQ ID NOS: 2.1
SEQ ID NO 12
LENGTH: 209
TYPE: PRI
ORGANISM: Homo sapiens
US-09-904-536-12
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Best Local Similarity 99.2%;
Matches 132; Conservative
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61 TVAGSKMQGLLERVNTEIHFVTKCAFQPPPSCLRFVQTNISRLLQETSEQLVALKPWITR 120
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                     ODCS FOHS PISSD PAVKIRELS DY LLQDY PVTVASNLQDEELCGGLWRLVLAQRWMERLK
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; Sequence 10, Application US/09109100C
; Patent No. 6291661
; GENERAL INFORMATION:
; APPLICANT: Graddis, Thomas J.
; APPLICANT: Graddis, Jeffrey T.
; TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
; FILE REFERENCE: 09260.0028
; CURRENT APPLICATION NUMBER: US/09/109,100C
; CURRENT FILING DATE: 1998-07-02
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                  Sequence 18, Application US/09109100C

Sequence 18, Application US/09109100C

Patent No. 6291661

GENERAL INFORMATION:

APPLICANT: Graddis, Thomas J.

APPLICANT: Graddis, Thomas J.

TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE

FILE REPERENCE: 03260.0028

CURRENT PELING DATE: 1998-07-02

NUMBER OF SEQ ID NOS: 20

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 18

LENGTH: 209

TYPE: PRT

TYPE: PT

TYPE: PT

CRAANISM: Homo sapiens

US-09-109-100-18
US-08-243-545-2
US-08-93-962-2
US-08-669-692-2
US-08-669-692-2
PCT-US94-0536-2
PCT-US94-0386-6
US-09-322-409-31
US-09-322-409-31
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US-09-411-527-31
US-09-411-527-31
US-09-411-527-26
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US-09-411-518-28
PCT-US94-05150-12
PCT-US94-05150-12
US-09-413-411-28
PCT-US94-05150-12
US-09-412-1254-61
US-09-412-1254-61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 QNFSRCLELQCQP 133
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Best Local Similarity 100.
Matches 133; Conservative
  RESULT 2
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Sequence 10, Appl
Sequence 6, Appli
                                                                       April 8, 2004, 17:03:57 ; Search time 11.9266 Seconds (without alignments) 575.708 Million cell updates/sec
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                                                                                                                         701
1 QDCSFQHSPISSDFAVKIRE.....IKPWITRQNFSRCLELQCQP 133
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/cgn2 6/ptodata2/jaa/5B_COMB.pep:*
/cgn2 6/ptodata2/jaa/6A_COMB.pep:*
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/cgn2 6/ptodata2/jiaa/packfiles1.pep:*
             GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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                                                                                                                                                                                     389414 segs, 51625971 residues
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                US-08-994-468-6_COPY_28_160
                                                    - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Match Length DB
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Perfect score:
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                                                                                                                                     Sequence:
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Gaps

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61 TVAGSKWQGLLERVNTEIHFVTKCAFQPPSCLRFVQTNISRLLQFTSEQLVALKPWITR 120
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                                                                                                                                                                                                                                                                                                       1 ODCSFOHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERLK
                                                                                                                                                                                                                      ,
                                                                                                                                             Query Match 100.0%; Score 701; DB 1; Length 235; Best Local Similarity 100.0%; Pred. No. 6.6e-80; Matches 133; Conservative 0; Mismatches 0; Indels
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CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
STREET: 51 University Street
STATE: Washington
COUNTRY: Washington
COUNTRY: Washington
COMPUTER: ReadallE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh
OPERATING SYSTEM: Macintosh
OPERATING SYSTEM: Macintosh
OPERATING SYSTEM: Washington
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/162,407
FILING DATE: December 18, 1997
CLASSIFICATION NUMBER: US/08/119,758
FILING DATE: August 25, 1993
APPLICATION NUMBER: 08/11,758
FILING DATE: August 12, 1993
CLASSIFICATION NUMBER: 08/19,33
APPLICATION NUMBER: 08/19,33
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/106,463
FILING DATE: May 24, 1993
CLASSIFICATION NUMBER: 28,1993
CLASSIFICATION NUMBER: 28,1993
CLASSIFICATION NUMBER: 32,655
REPERRENCE/DOCKET NUMBER: 22,655
REPRENCE/DOCKET NUMBER: 22,655
REPRENCE/
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Sequence 6, Application US/08993962
Patent No. 5843423
GENERAL INFORMATION:
APPLICANT: Lyman, Stewart D.
APPLICANT: Beckmann, M. Patricia
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
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TELEX: 756822
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-243-545-6
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                                                                                                                                                                                              Query Match
100.0%; Score 701; DB 3; Length 212;
Best Local Similarity 100.0%; Pred. No. 5.7e-80;
Matches 133; Conservative 0; Mismatches 0; Indels C
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Lyman, Stewart D.
APPLICANT: Beckmann, M. Patricia
TITLE OF INTENTION: Ligands for flui/fik-2 Receptors
UNDMER OF SEQUENCES:
ADDRESSES:
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Patent No. 5554512
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INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS: LENGTH: 235 amino acids TYPE: amino acid
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                ; LENGTH: 212
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-109-100-10
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Best Local Similarity
Matches 133; Conserv
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                                                                                                                                                   1 QDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMBRLK
                                                                                                            Gaps
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0
                                                                     Length 235;
                                                                                                         0; Indels
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APPLICANT: Lyman, Stewart D.
APPLICANT: Lowers, M. Patricia
APPLICANT: Beckmann, M. Patricia
TITLE OF INVENTION: Ligands for fil13/fik-2 Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Stephen L. Malaska, Immunex Corporation-
STREET: 51 University Street
CITY: Seatile
                                                              ; Score 701; DB 2;
; Pred. No. 6.6e-80;
0; Mismatches 0;
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/160,841
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PRICK APPLICATION DATA:
APPLICATION UNDRER:
APPLICATION NUMBER: 08/111,758
FILING DATE: August 25, 1993
PRICK APPLICATION NUMBER: 08/106,463
FILING DATE: August 12, 1993
PRICK APPLICATION NUMBER: 08/106,463
FILING DATE: August 12, 1993
PRICK APPLICATION NUMBER: 08/106,463
FILING DATE: May 24, 1993
ATTORNEY AGENT: May 24, 1993
ATTORNEY AGENT: NEORAMION:
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Patent No. 6190655
                                                                     Ouery Match
Best Local Similarity 100.0%;
Matches 133; Conservative 0.
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MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh
SOFTWARE: Microsoft Word,
                                                                                                                                                                                                                                                                                                                     121 ONFSRCLELOCOP 133
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               ; MOLECULE TYPE: protein US-08-993-962-6
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Length 235;

DB 3;

100.0%; Score 701;

Query Match

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; Sequence 1, Application US/09109100C
; Patent No. 6291661
; GENERAL INFORMATION:
; APPLICANT: Graddis, Thomas J.
; APPLICANT: McGrew, Jeffrey T.
; TITLE OF INFORMATION: FLT3-L MUTANTS AND METHODS OF USE
; FILE REFERENCE: 03260.0028
; CURRENT APPLICANTON NUMBER: US/09/109,100C
; CURRENT FILING DATE: 1998-07-02
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: Patentin Ver. 2.1
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Patent No. 6630143
GENERAL INFORMATION:
APPLICANT: Lyman, Stewart D.
APPLICANT: Beckmann, M. Patricia
APPLICANT: Beckmann, M. Patricia
APPLICANTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSE: Stephen L. Malaska, Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IE: Stephen L. Malaska, Immunex Corporation 51 University Street
100.0%; Pred. No. 6.6e-80;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
100.0%; Score 701; DB 3;
Best Local Similarity 100.0%; Pred. No. 6.6e-80;
Matches 133; Conservative 0; Mismatches 0;
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Microsoft Word, Version #5.1
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COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macinto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 ONFSRCLELOCOP 133
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                                                                                                                                                                                                                                                                                                                                            148 ONFSRCLELOCOP 160
                                                                                                                                                                                                                                                                                    121 ONFSRCLELOCOP 133
                              133; Conservative
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 51 Univers
CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 1
LENGTH: 235
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61 TVAGSKWQGLLERVNTEIHFVTKCAFQPPSCLRFVQTNISRLLQETSEQLVALKPWITR 120
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100.0%; Score 701; DB 4; Length 235;
Best Local Similarity 100.0%; Pred. No. 6.6e-80;
Matches 133; Conservative 0; Mismatches 0; Indels
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GENERAL INFORMATION:
APPLICANT: Lyman, Stewart D.
APPLICANT: Lyman, Stewart D.
APPLICANT: Lyman, M. Patricia
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Stephen L. Malaska, Immunex Corporation
STREET: 51 University Street
CITY: Reattle
STATE: Washington
COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US94/05365

FILING DATE: May 24, 1994

CLASSIPICATION:
PRIOR APPLICATION DATA:

APPLICATION NUMBER: -to be assigned-
CLASSIFICATION: 530

PHOR APPLICATION NUMBER: 08/162,407

FILING DATE: 03-DEC-1933

APPLICATION NUMBER: 08/111,758

FILING DATE: ANGUE 25, 1993

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/106,463

FILING DATE: ANGUE 12, 1993

CLASSIFICATION S30

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/06,394

FILING DATE: May 24, 1993

CLASSIFICATION NUMBER: 08/068,394

FILING DATE: May 24, 1993

CLASSIFICATION S30

RECISTRATION NUMBER: 32,655

RECISTRATION NUMBER: 32,655

RECISTRATION NUMBER: 32,655

TELEFONNINICATION INFORMATION:
TELEFONNINICATION INFORMAT
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TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (206) 233-064
TELEX: 756822
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CT-US94-05365-6
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100.0%; Score 701; DB 4; Length 235;
Best Local Similarity 100.0%; Pred. No. 6.6e-80;
Matches 133; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence, Application US/08444626
Sequence, Application US/08444626
Patent No. 6632424
GENERAL INFORMATION:
APPLICANT: Eschmann, Stewart D. APPLICANT: Beckmann, M. Patricia
APPLICANT: Beckmann, M. Patricia
TITLE OF INVENTION: Ligands for flt3/flk-2 Receptors
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Stephen L. Malaska, Immunex Corporation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 7.0.1
SOFTWARE: Microsoft Word, Version #5.1
CURRENT APPLICATION DATA:
PILING DATE: 19-MAY-1995
   CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/669,692
FILING DATE: 24-UN-1996
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/162,407
FILING DATE: December 3, 1993
APPLICATION NUMBER: 08/111,758
FILING DATE: August 25, 1993
PRIOR APPLICATION NUMBER: 08/106,463
FILING DATE: August 12, 1993
FRIOR APPLICATION NUMBER: 08/06,833
FRIOR APPLICATION NUMBER: 08/06,833
FRIDR APPLICATION NUMBER: 08/06,833
FRIDR APPLICATION NUMBER: 08/06,833
FRIDR APPLICATION NUMBER: 08/06,833
FRIENENCE/DOCKET NUMBER: 32,655
REGISTRATION NUMBER: 32,655
RECCOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: (206) 283-0644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (200,
TELEFAX: (200,
TELEFAX: 756822
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 235 amino acids
TVPE: amino acids
TVPE: amino acids
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MOLECULE TYPE: protein
US-08-669-692-6
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Score 697; DB 3; Length 209;
Pred. No. 1.8e-79;
0; Mismatches 1; Indels
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GENERAL INFORMATION:
APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
TILLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
TILE REFERENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/109,100C
CURRENT FILING DATE: 1998-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 12
LENGTH: 209
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APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
APPLICANT: McGraw, Jeffrey T.
III.E OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/109,100C
CURRENT FILING DATE: 1998-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PatentIn Ver. 2.1
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Pred. No. 1.8e-79;
0; Mismatches 1
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; Sequence 14, Application US/09109100C
; Patent No. 6291661
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Patent No. 6291661
             99.4%;
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             Query Match
Best Local Similarity 99.2
Matches 132; Conservative
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Best Local Similarity 99.2
Matches 132; Conservative
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CRGANISM: Homo sapiens
US-09-109-100-14
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CRGANISM: Homo sapiens
US-09-109-100-12
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US-09-109-100-12
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) Patent No. 6291661
) GENERAL INFORMATION:
APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
TITLE OF INVENTION: FLT3-L MUTANTS AND METHODS OF USE
TITLE REPERENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/109,100C
CURRENT FILING DATE: 1998-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PatentIn Ver. 2.1
LENGTH: 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.0%; Pred. No. 6.6e-80;
Matches 133; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATIONAL, NO...
REGISTRATION NUMBER: 32,655
REPERBINGE/DOCKET NUMBER: 2813-B
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 587-0430
TELEFAX: (206) 233-0644
                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/111,758
FILING DATE: August 25, 1993
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/106,463
FILING DATE: August 12, 1993
CLASSIFICATION:
PRIOR APPLICATION BATA:
PRIOR APPLICATION NUMBER: 08/068,394
FILING DATE: MAY 24, 1993
CLASSIFICATION:
                    CLASSIFICATION:
PRIOR APPLICATION DATA:
PALOLICATION NUMBER: 08/209,502
FILING DATE: March 7, 1994
                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/162,40
FILING DATE: December 3, 1993
CLASSIFICATION:
May 11, 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            235 amino acids
amino acid
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
CORGANISM: Homo sapiens
US-09-109-100-9
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US-09-109-100-9
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                                                                                                                                                                                                            61 TVAGSKMQGLLBRVNTEIHFVTKCAFQPPFSCLRFVQTNISRLLQETSEQLVALKPWITR 120
                                                                                                                                                                                                                                                                                 62 TVTGSKMQGLLBRVNTEIHFVTKCAFQPPSCLRFVQTNISKLLQBTSEQLVALKPWITR 121
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                                                                    1 QDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERLK 60
                                                                                                                                    2 ODCSFOHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEBLCGGLWRLVLAQRWMERLK 61
       Gaps
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SEQ ID NO 15
LENGTH: 20
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                                                                                                                       ODCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERLK 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 QDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERLK 60
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                                                                                       1 QDCSFQHSPISSDFAVKIRELSDYLLQDYPVTVASNLQDEELCGGLWRLVLAQRWMERLK
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                                           Gaps
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Length 209;
                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
APPLICANT: McGrew, Jeffrey T.
TITLE OF INVENTION: F113-L MUTANTS AND METHODS OF USE FILE REFERENCE: 02260.0028
CURRENT APPLICATION NUMBER: US/09/109,100C
CURRENT FILING DATE: 1998-07-02
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Graddis, Thomas J.
APPLICANT: Graddis, Thomas J.
TITLEANT: MGGEW, Jeffrey T.
TITLE OF INVENTION: FLT3-1 MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
FILE REFERENCE: 19360.0028
CURRENT APPLICATION WUMBER: US/09/109,100C
CURRENT FILING DATE: 1998-07-02
NUMBER OF SEQ ID NOS: 20
SOPTWARE: Patentin Ver. 2.1
SEQ ID NO 11.
99.4%; Score 697; DB 3; ilarity 99.2%; Pred. No. 1.8e-79; Conservative 1; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 11, Application US/09109100C Patent No. 6291661
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                          5.09-109-100-17
Sequence 17, Application US/09109100C
Patent No. 6291661
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
CRGANISM: Homo sapiens
US-09-109-100-17
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Best Local Similarity
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Query Match
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Sequence 15, Application US/09109100C
Sequence 15, Application US/09109100C
Sequence 15, Application US/09109100C
Sequence 15, Application US/09109100C
SETTING OF INVENTION:
TILE OF INVENTION: FLIT3-L MUTANTS AND METHODS OF USE
FILE REFERENCE: 03260.0028
CURRENT APPLICATION NUMBER: US/09/109,100C
CURRENT FILING DATE: 1998-07-02
NUMBER OF SEG 1D NOS: 20
SOFTWARE: Patentin Ver. 2.1
99.2%; Pred. No. 3.2e-79;
tive 1; Mismatches 0;
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Pred, No. 3.2e-79;
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99.2%;
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Best Local Similarity 99.2
Matches 132; Conservative
Best Local Similarity 99.2
Matches 132; Conservative
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